ASBESTOS INSPECTION AND MANAGEMENT PLAN REPORT

Prepared for:



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Project Location:

Federal Building

8930 Ward Parkway Kansas City, MO

Project Number: 99143.18

Prepared by:



Asbestos Inspection and Management Plan Report – MO0134

October 7, 2010

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1. GENERAL INFORMATION

As authorized by the General Services Administration – Heartland Region (GSA), OCCU-TEC has developed an Asbestos Management Plan for the Federal Building in Kansas City, MO (MO0134). This Asbestos Management Plan was developed in accordance with the Environmental Protection Agency's (EPA's) Asbestos Hazard Emergency Response Act (AHERA) 40 CFR 763. 93, the United States Department of Labor, Occupational Safety and Health Administration's (OSHA's) Asbestos Standards [29 CFR 1910.1001, 29 CFR 1926.1101].

These regulations place the burden of asbestos management on the owners and operators of facilities that may contain asbestos-containing materials (ACMs), as well as employers whose employees may be expected to work near or with ACMs. As the GSA is both a facility owner and an employer, it has responsibilities in both aspects of the Standards. These responsibilities include identification of potential asbestos exposure hazards, notification of employees and occupants of the presence of ACM, employee awareness and operational training, record keeping, and management of renovations and maintenance operations.

In general, the management plan development process consists of:

- A review of available documents, such as blueprints, construction specifications, and previous asbestos inspection data.
- A visual inspection of building areas and elements to locate suspect ACM; sampling of suspect ACM as required; and assessment of the physical condition of the ACM.
- Analysis of the collected samples to confirm the suspected material as ACM.
- Assignment of required and appropriate response actions for all ACM identified.
- Development of an Operations and Maintenance Program to institute appropriate controls for the management of ACM remaining in-place.

This Management Plan should be used as the working document that outlines the procedures for undertaking asbestos related activities. A Management Plan should contain at least the following:

- Inspection report
- Planned response actions
- Remaining asbestos in the facility
- A plan for reinspection and other activities
- An Operations and Maintenance Plan (O&M)
- Description of hazard assessment for all ACBM
- Location and description of where preventative measures and response actions are to be implemented
- Justification for the action to be taken.
- Identification of ACBM which remains after response action

• Program for informing workers and building occupants

Elements such as response action documentation, employee training records, O&M procedures, reinspection and periodic surveillance records, etc. should be used in conjunction with this Management Plan Report. Copies of this Management Plan Report should be located at both the GSA Safety Office and at the facility.

2. GSA DESIGNATED PERSON ACKNOWLEGEMENT

In accordance with 40 CFR 763.93(i) of the EPA's AHERA regulation, the undersigned Designated Person (DP) hereby certifies that the following general responsibilities under 40 CFR 763.84 have been or will be met:

- A. Ensure that the activities of any persons, who perform inspections, re-inspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
- B. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E, and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA Worker Protection rule, or applicable State regulations).
- C. Ensure that workers and building occupants are informed at least annually about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.
- D. Ensure that short-term workers (e.g., contractors, telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a facility are provided information regarding the locations for ACBM and suspected ACBM assumed to be ACM.
- E. Ensure that warning signs and labels are posted in accordance with 40 CFR 763.95, 1910.1001, and 1926.1101.
- F. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under 40 CFR 763.93(g).
- G. Designate a person to ensure that requirements under 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under 763.84. Such training shall provide, as necessary, basic knowledge of: health effects of asbestos; detection, identification, and assessment of ACBM; options for controlling ACBM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Transportation and the U.S. Environmental Protection Agency.

H. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform response activities under Part 763, Subpart E.

Name of GSA Designated Person:	
Designated Person's Signature:	Date:

3. PLAN FOR REINSPECTION

Under 40 CFR 763.93, a plan for reinspection must be included in the Management Plan. At least once every three years after a management plan has been in effect, a reinspection should be made by and accredited inspector of all friable and non-friable known or assumed ACBM.

4. PERIODIC REVIEW OF PLAN

The Management Plan should be periodically reviewed to maintain compliance. All asbestos-related records must be retained to comply with all Federal, State, and Local regulations. Records that are required to be maintained include, but are not limited to, the following:

- Employee training records for one year beyond the last date of each worker's employment.
- Inspection, reinspection, and assessment reports of all buildings surveyed indefinitely.
- Asbestos related employee medical records for duration of employment plus 30 years.
- OSHA personnel air sampling records for 30 years.
- A copy of this Management Plan.

All disposal documentation for a minimum of 30 years, but recommended to be kept indefinitely.

5. PERIODIC SURVEILLANCE OF ACBM

At least once every six months after a management plan has been in effect, periodic surveillance should be conducted. Each person performing periodic surveillance must: visually inspect all areas that are identified in the Management Plan as ACBM of assumed ACBM, record the date of the surveillance, his or her name, and any changes in the condition of the materials, and submit a copy of the record to the Designated Person for inclusion in the Management Plan.

6. SUMMARY OF ACBM RESPONSE ACTIONS

Controlling the release of asbestos fibers from ACBM is the basic purpose of the Management Plan, and there are various options available. AHERA refers to actions taken in buildings with ACBM as "response actions". Response action alternatives are defined by the AHERA Rule as follows:

- Operations and Maintenance Program provide proper training of personnel, proper cleaning procedures, work practices, and periodic surveillance to assure friable ACBM is in good condition
- **Repair** returning damaged ACBM to an undamaged condition
- **Encapsulation** treating ACBM with a liquid that, after proper application, surrounds or embeds asbestos fibers in an adhesive matrix to prevent fiber release
- **Enclosure** an air-tight (or as close to air-tight as possible to construct) barrier installed between the friable asbestos and the building environment
- **Removal** stripping ACBM from its substrate

Records of all Response Actions should be included in the Management Plan.

7. LIMITATIONS, CERTIFICATION AND SIGNATURE

OCCU-TEC identified and collected samples of suspect ACBM from the Federal Building located at 8930 Ward Parkway in Kansas City Missouri. Because OCCU-TEC did not perform destructive sampling to structural elements and several areas were inaccessible, the possibility exists that some suspect asbestos-containing building material may remain undiscovered within walls, pipe chases, doors, etc. If during demolition or renovation activities, materials are found that do not match materials sampled, they should be considered Presumed Asbestos-Containing Materials, and treated as ACM until sampling and laboratory analysis meeting the AHERA requirements is conducted.

I, the undersigned, being an employee of OCCU-TEC located at 4151 N. Mulberry Drive, Suite 275, Kansas City, Missouri 64116, hereby certify that I conducted an inspection for asbestoscontaining building materials at the aforementioned address on September 14, 2010.

	(b) (6)	
Inspector's Signature:		Date: October 7, 2010

Joshua Ashley Missouri Licensed Asbestos Inspector 7011060310MOIR12619 Expires: 06/16/2011

Expires: 00/10/2011

I, the undersigned, being an employee of OCCU-TEC located at 4151 N. Mulberry Drive, Suite 275, Kansas City, Missouri 64116, hereby certify that to the best of my knowledge, the information gathered during the Asbestos Inspection and included in this Management Plan is correct and accurate.

(b) (6)

Date: October 7, 2010

Management Planner's Signature:

Jeff Smith Missouri Licensed Management Planner 7011060310MOMR2285 Expires: 06/3/2011

Appendix A

Inventories of ACBM

Monday, October 04, 2010

Ward Parkway Federal Building

8930 Ward Parkway

Kansas City MO

Floor ID: 01 Func Spce #: 05 Location: Cleaner's Room Type of Mat'l: Miscellaneous

Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound

08-Jul-10 Is It Asbestos? No Friable? No Sample Results: None Detected Ontv: 360 Sq. Ft. **Survey Date: Building Wide** Scope of Survey:

Potential for Damage: Medium Condition of Mat'l: Good

Notes: 20x8

Floor ID: 01 Func Spce #: 06 Location: Compressor Room Type of Mat'l:

Description/ Homogeneous Mat'l:

08-Jul-10 Is It Asbestos? Friable? **Sample Results: Onty: Survey Date:** Scope of Survey: Building Wide

Condition of Mat'l: Potential for Damage:

Notes: No Suspect ACM 45x22

Location: Cubicle Work Area Floor ID: 01 Func Spce #: 13 Type of Mat'l: Miscellaneous

Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound

Is It Asbestos? No Friable? No **Onty:** 8400 Sq. Ft. 08-Jul-10 **Sample Results: Survey Date:** Scope of Survey: Building Wide

Potential for Damage: Medium Condition of Mat'l: Good

Notes: 110x165

Location: Cubicle Work Area Type of Mat'l: Miscellaneous Floor ID: 01 Func Spce #: 13

Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard

Onty: 840 Ln. Ft. 08-Jul-10 Is It Asbestos? Friable? No **Sample Results: Survey Date:** Scope of Survey: **Building Wide**

Potential for Damage: Low Condition of Mat'l: Good

Notes:

Monday, October 04, 2010

Floor ID: 01 Func Spce #: 13 Location: Cubicle Work Area					Type of Mat'l: Miscellaneous			
Description	n/ Homogeneous Mat'l: 2'x4' W	hite w/Divots and Pinho	les Ceiling Tile					
Is It Asbestos?	No Friable? Yes	Sample Results:	C 114 63.5 (II	C1	Qnty:	22900 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
	Potential for Damage: High		Condition of Mat'l:	Good			scope of survey.	
N	Notes: 95x50							
Floor ID: 01	Func Spce #: 49	Location: East Entr	rance			Type	of Mat'l: Miscellaneous	
Description	n/ Homogeneous Mat'l: 4" Dark	Gray Baseboard						
Is It Asbestos?	No Friable? No	Sample Results:			Qnty:	100 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
	Potential for Damage: Low		Condition of Mat'l:	Good			Scope of Survey:	Dunding Wide
N	Notes:							
Floor ID: 01	Func Spce #: 49	Location: East Entr	rance			Туре	of Mat'l: Miscellaneous	
Description	n/ Homogeneous Mat'l: Drywal	and Drywall Joint Comp	pound					
Is It Asbestos?	No Friable? No	Sample Results:			Qnty:	1500 Sq. Ft.	Survey Date:	14-Sep-10 Building Wide
	Potential for Damage: Medium	1	Condition of Mat'l:	Good			Scope of Survey:	building wide
N	Notes:							
Floor ID: 01	Func Spce #: 49	Location: East Entr	rance			Туре	of Mat'l: Miscellaneous	
Description	n/ Homogeneous Mat'l: Fire Do	or						
Is It Asbestos? A		Sample Results:			Qnty:	1 Each	Survey Date:	14-Sep-10
	Potential for Damage: Low		Condition of Mat'l:	Good			Scope of Survey:	Building Wide
N	Notes:							
Floor ID: 01	Func Spce #: 07	Location: Fire Pum	p Room			Type	of Mat'l: Miscellaneous	
Description	n/ Homogeneous Mat'l: Fire Do	or						
	Assumed Friable? Assum	Sample Results:			Qnty:	1 Each	Survey Date:	08-Jul-10
	Potential for Damage: Low		Condition of Mat'l:	Good			Scope of Survey:	Building Wide
N	Notes:							

Monday, October 04, 2010

Description/ Homogeneous Mat'l: D			J.F	: Miscellaneous	
T TALL A O No. TIVILO No.		0.4	260 S - F4	G D	08-Jul-10
Is It Asbestos? No Friable? No Potential for Damage: M	Sample Results: None Detected edium Condition of Mat'l:	- •	360 Sq. Ft.	Survey Date: Scope of Survey:	Building Wide
Notes: 20x8					
Floor ID: 01 Func Spce #: 09	Location: Mens Restroom		Type of Mat'l	: Miscellaneous	
Description/ Homogeneous Mat'l: Pl	aster				
Is It Asbestos? No Friable? No	Sample Results: None Detected Condition of Mat'l:	- •	820 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Potential for Damage: Lo	Condition of Mat 1:	Good		scope of survey.	C
Floor ID: 01 Func Spce #: 09	Location: Mens Restroom		Type of Mat'l	: Miscellaneous	
	x2' White w/Small Fissures and Pinholes Ceiling Tile	•	264 G F		00 1 1 10
Is It Asbestos? No Friable? Yes Potential for Damage: H	Sample Results: None Detected igh Condition of Mat'l:	~ •	364 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Notes:					
Floor ID: 01 Func Spce #: 09	Location: Mens Restroom		Type of Mat'l	: Miscellaneous	
Description/ Homogeneous Mat'l: D	rywall and Drywall Joint Compound				
Is It Asbestos? No Friable? No	Sample Results:		820 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Potential for Damage: M	edium Condition of Mat'l:	Good		scope of our vey.	Dunuing Wide
Notes: 28x13					
Floor ID: 01 Func Spce #: 09	Location: Mens Restroom		Type of Mat'l	: Miscellaneous	
Description/ Homogeneous Mat'l: 4'	Blue Baseboard				
Is It Asbestos? No Friable? No Potential for Damage: L	Sample Results: None Detected Condition of Mat'l:	- •	82 Ln. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Notes:	Condition of Mat I.			-	

Monday, October 04, 2010

Floor ID: 01 Func Spce #: 0 Description/ Homogeneous 1		Work Area	Тур	oe of Mat'l:	
Is It Asbestos? Friable Potential for Dan Notes: No Access	? Sample Results:	Condition of Mat'l:	Qnty:	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Floor ID: 01 Func Spce #: 0 Description/ Homogeneous 1		Access Point	Тур	e of Mat'l:	
Is It Asbestos? Friable Potential for Dan Notes: No Access	? Sample Results:	Condition of Mat'l:	Qnty:	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Floor ID: 01 Func Spee #: 0		Computer Lab	Тур	oe of Mat'l:	
Description/ Homogeneous I Is It Asbestos? Friable Potential for Dan Notes: No Access	? Sample Results:	Condition of Mat'l:	Qnty:	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Floor ID: 01 Func Spee #: 0		ab	Тур	oe of Mat'l:	
Is It Asbestos? Friable Potential for Dan Notes: No Access	? Sample Results:	Condition of Mat'l:	Qnty:	Survey Date: Scope of Survey:	08-Jul-10 Building Wide
Floor ID: 01 Func Spce #: 1 Description/ Homogeneous 1		erver Room	Тур	pe of Mat'l:	
Is It Asbestos? Friable Potential for Dan Notes: No Access	? Sample Results:	Condition of Mat'l:	Qnty:	Survey Date: Scope of Survey:	08-Jul-10 Building Wide

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Floor ID: 01 Func Spee #: 11 Location: Software			Type of	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	1060 Sq. Ft.	Survey Date: 08-Jul-10 Scope of Survey: Building Wide	
Floor ID: 01 Func Spce #: 11 Location: Softward Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	e Storage		Type of	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	106 Ln. Ft.	Survey Date: 08-Jul-10 Scope of Survey: Building Wide	
Floor ID: 01 Func Spce #: 11 Location: Softward Description/ Homogeneous Mat'l: Black w/White Streaks Linoleum			Type of	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: Low Notes: Under Carpet	Condition of Mat'l: Good	Qnty:	313 Sq. Ft.	Survey Date: 08-Jul-10 Scope of Survey: Building Wide	
Floor ID: 01 Func Spce #: 11 Location: Softward Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho	· ·	Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l: Good	Qnty:	313 Sq. Ft.	Survey Date: 08-Jul-10 Scope of Survey: Building Wide	
Floor ID: 01 Func Spce #: 10 Location: Storage			Type of Mat'l: Miscellaneous		
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	880 Sq. Ft.	Survey Date: 08-Jul-10 Scope of Survey: Building Wide	

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Floor ID: 01 Func Spce #: 10 Location: Storage Room 1021			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Bla Is It Asbestos? No Friable? Yes Potential for Damage: Me Notes:	Sample Results: None Detected	Qnty: 340	Sq. Ft. Survey Date: Scope of Survey:	08-Jul-10 Building Wide		
Floor ID: 01 Func Spce #: 10 Description/ Homogeneous Mat'l: 2'x	Location: Storage Room 1021 4' White w/Divots and Pinholes Ceiling Tile		Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? Yes Potential for Damage: His	Sample Results: None Detected Condition of Mat'l: Good	Qnty: 340	Sq. Ft. Survey Date: Scope of Survey:	08-Jul-10 Building Wide		
Floor ID: 01 Func Spce #: 10 Description/ Homogeneous Mat'l: Fir	Location: Storage Room 1021 e Door		Type of Mat'l: Miscellaneous			
Is It Asbestos? Assumed Friable? Assumed Potential for Damage: Lo Notes:	Sample Results:	Qnty: 1 E	Sach Survey Date: Scope of Survey:	08-Jul-10 Building Wide		
Floor ID: 01 Func Spce #: 10 Description/ Homogeneous Mat'l: 4"	Location: Storage Room 1021 Dark Gray Baseboard		Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Lo Notes:	Sample Results: None Detected	Qnty: 88 1	Ln. Ft. Survey Date: Scope of Survey:	08-Jul-10 Building Wide		
Floor ID: 01 Func Spce #: 08 Location: Women's Restroom Description/ Homogeneous Mat'l: Plaster			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Lo Notes:	Sample Results: None Detected	Qnty: 2170	O Sq. Ft. Survey Date: Scope of Survey:	08-Jul-10 Building Wide		

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Floor ID: 01 Func Spce #: 08 Location: Women's Restroom				Type of Mat'l: Miscellaneous			
Is It Asbestos?	_	hite w/Small Fissures and Pinholes Ceiling Tile Sample Results: None Detected Condition of Mat'l: Good	- •	756 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide	
Floor ID: 01 Descripti	Func Spce #: 08 on/ Homogeneous Mat'l: Drywal	Location: Women's Restroom I and Drywall Joint Compound		Type of Mat'l:	Miscellaneous		
Is It Asbestos?	No Friable? No Potential for Damage: Medium Notes:	Sample Results: Condition of Mat'l: Good	- •	2170 Sq. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide	
Floor ID: 01 Descripti	Func Spce #: 08 on/ Homogeneous Mat'l: 4" Choo	Location: Women's Restroom		Type of Mat'l:	Miscellaneous		
Is It Asbestos?	No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l: Good		51 Ln. Ft.	Survey Date: Scope of Survey:	08-Jul-10 Building Wide	
Floor ID: 02 Descripti	Func Spce #: 35 on/ Homogeneous Mat'l: No Acc	Location:		Type of Mat'l:			
Is It Asbestos?	Friable? Potential for Damage: Notes:	Sample Results: Condition of Mat'l:	Qnty:		Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02	Func Spce #: 39 on/ Homogeneous Mat'l: 4" Dark	Location: 2nd Floor Halls		Type of Mat'l:	Miscellaneous		
Is It Asbestos?	_	Sample Results: Condition of Mat'l: Good		3858 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 02 Func Spee #: 39 Location: 2nd Floor Halls			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Comp Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Go	- •	34722 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spee #: 39 Location: 2nd Floor			Type of Mat	'l: Miscellaneous		
Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l: Go	Qnty:	6695 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 40 Location: Air Hand Description/ Homogeneous Mat'l: Plaster	iler		Type of Mat	'l: Miscellaneous		
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Go	- •	950 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 40 Location: Air Hand			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Complements Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Go	- •	1896 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 24 Location: Break Ro Description/ Homogeneous Mat'l: Sink Undercoat - White		Type of Mat'l: Miscellaneous				
Is It Asbestos? No Friable? No Sample Results: No Potential for Damage: Low Notes:	one Detected Condition of Mat'l: Go	- •	8 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 02 Func Spce #: 24 Location: Break Room 2404			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Linoleum - White stone pattern Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:	- •	313 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 24 Location: Break Ro Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	oom 2404		Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l:		75 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 24 Location: Break Room 2404 Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound			Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:	- •	675 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 24 Location: Break Ro Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho			Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l:	- •	313 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 23 Location: Compute Description/ Homogeneous Mat'l: Drywall and Drywall Joint Comp			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:		1152 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 02 Func Spee #: 23 Location: Computer Room 2079			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' White Is It Asbestos? No Friable? Yes S Potential for Damage: High Notes:	e w/Divots and Pinholes Ceiling Tile ample Results: Condition of Mat'l:	- •	960 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 23 I Description/ Homogeneous Mat'l: 4" Dark Gr	Location: Computer Room 2079 ray Baseboard		Type of Mat'l: Mis	scellaneous		
Is It Asbestos? No Friable? No S Potential for Damage: Low Notes:	ample Results: Condition of Mat'l:	- •	128 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spee #: 25 I Description/ Homogeneous Mat'l: Drywall an	Location: Computer Room 2302 and 2304 d Drywall Joint Compound		Type of Mat'l: Mis	scellaneous		
Is It Asbestos? No Friable? No S Potential for Damage: Medium Notes:	ample Results: Condition of Mat'l:	- •	1350 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 25 I Description/ Homogeneous Mat'l: 4" Dark Gr	Location: Computer Room 2302 and 2304 ray Baseboard		Type of Mat'l: Mis	cellaneous		
	ample Results: Condition of Mat'l:		150 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 25 I Description/ Homogeneous Mat'l: 2'x4' White		Type of Mat'l: Miscellaneous				
	ample Results: Condition of Mat'l:	Qnty: Good	626 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 02 Func Spce #: 46	Location: East Stairwell	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 4" Dark Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat's	- •	240 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 46 Description/ Homogeneous Mat'l: Stair To	Location: East Stairwell ead - Gray		Type of Mat'l: M	iscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat's	- •	124 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 46 Description/ Homogeneous Mat'l: Drywal	Location: East Stairwell l and Drywall Joint Compound		Type of Mat'l: M	iscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Medium Notes:	Sample Results: Condition of Mat'	- •	3972 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 46 Description/ Homogeneous Mat'l: Linoleu	Location: East Stairwell		Type of Mat'l: M	iscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat's	- •	400 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 46	Location: East Stairwell		Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: Linoleu Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'	- •	20 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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-	ation: East Stairwell	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 24"x24" Floori Is It Asbestos? No Friable? No Samp Potential for Damage: Low Notes:	ng - Gray ple Results: Condition of Mat'l:	- •	118 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 46 Loca Description/ Homogeneous Mat'l: Linoleum - Wh	ation: East Stairwell nite stone pattern		Type of Mat'l: Mis	cellaneous	
	ple Results: Condition of Mat'l:	- •	160 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 41 Loca Description/ Homogeneous Mat'l: Drywall and	ation: Janitorial Closet rywall Joint Compound		Type of Mat'l: Miss	cellaneous	
Is It Asbestos? No Friable? No Sam Potential for Damage: Medium Notes:	ple Results: Condition of Mat'l:	- •	975 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 42 Loca Description/ Homogeneous Mat'l: 4" Dark Gray F	ation: Mens Restroom		Type of Mat'l: Mis	cellaneous	
	ple Results: Condition of Mat'l:		30 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 42 Loca Description/ Homogeneous Mat'l: 2'x4' White w/I	ation: Mens Restroom		Type of Mat'l: Mis	cellaneous	
	ple Results: Condition of Mat'l:	٠,	504 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 02 Func Spce #: 42 Location: Mens		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Co Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	828 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 21 Location: Office Description/ Homogeneous Mat'l: Drywall and Drywall Joint Co			Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	846 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 21 Location: Office Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pin			Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	None Detected Condition of Mat'l: Good	Qnty:	550 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 21 Location: Office Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	2080		Type of N	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	94 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 26 Location: Office		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pin Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	holes Ceiling Tile Condition of Mat'l: Good	Qnty:	950 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 02 Func Spce #: 26	Location: Office 25	510	Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: 4" Dark	Gray Baseboard						
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l:		Qnty:	400 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							
Floor ID: 02 Func Spce #: 26	Location: Office 25	510			Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: Linoleu	ım - White stone pattern						
Is It Asbestos? No Friable? No Potential for Damage: Medium Notes:	Sample Results:	Condition of Mat'l:		Qnty:	418 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 26	Location: Office 25	510			Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: Fire Do	oor						
Is It Asbestos? Assumed Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l:		Qnty:	4 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							
Floor ID: 02 Func Spce #: 26	Location: Office 25	510			Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: Drywal	l and Drywall Joint Comp	pound					
Is It Asbestos? No Friable? No Potential for Damage: Medium Notes:	Sample Results:	Condition of Mat'l:		Qnty:	3600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 33	Location: Office an	nd cubicle space 2028			Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: 4" Dark	Gray Baseboard						
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l:		Qnty:	1323 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							

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Floor ID: 02 Func Spce #: 33 Location: Office an	_	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l:		8318 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 33 Location: Office an Description/ Homogeneous Mat'l: Fire Door	nd cubicle space 2028		Type of Mat'l	: Miscellaneous	
Is It Asbestos? Assumed Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l:		16 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 33 Location: Office at Description/ Homogeneous Mat'l: Linoleum - White stone pattern	nd cubicle space 2028		Type of Mat'l	: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:	- •	600 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 33 Location: Office an	•		Type of Mat'l	: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:	- •	11907 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spee #: 27 Location: Office an	_		Type of Mat'l	: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l:	Qnty:	20295 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 02	Func Spce #: 27	Location: Office and cubicle space 2037	Type of Mat'l: Miscellaneous			
Is It Asbestos?	on/ Homogeneous Mat'l: Sink U No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l:		nty: 8 Sq.	Ft. Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Description	Func Spce #: 27 on/ Homogeneous Mat'l: Linoleu	Location: Office and cubicle space 2037 um - White stone pattern			Type of Mat'l: Miscellaneous	
Is It Asbestos?	No Friable? No Potential for Damage: Medium Notes:	Sample Results: Condition of Mat'l:	_	nty: 760 I	Ln. Ft. Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02	Func Spce #: 27	Location: Office and cubicle space 2037 Thite w/Divots and Pinholes Ceiling Tile			Type of Mat'l: Miscellaneous	
Is It Asbestos?	No Friable? Yes Potential for Damage: High Notes:	Sample Results: None Detected Condition of Mat'l:	_	nty: 10720	Sq. Ft. Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Description	Func Spce #: 27 on/ Homogeneous Mat'l: 4" Darl	Location: Office and cubicle space 2037 gray Baseboard			Type of Mat'l: Miscellaneous	
Is It Asbestos?	No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	_	nty: 2255	Ln. Ft. Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02	Func Spce #: 27	Location: Office and cubicle space 2037			Type of Mat'l: Miscellaneous	
Is It Asbestos?	on/ Homogeneous Mat'l: Fire Do Assumed Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	_	nty: 36 Ea	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 02 Func Spce #: 36	Location: Office and cubicle space 2210	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' Wh Is It Asbestos? No Friable? Yes Potential for Damage: High Notes:	Sample Results: Condition of Mat'l:	~ .	5632 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 36 Description/ Homogeneous Mat'l: 4" Dark	Location: Office and cubicle space 2210 Gray Baseboard		Type of Mat'l: Ma	iscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	- •	446 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 36 Description/ Homogeneous Mat'l: Fire Doc	Location: Office and cubicle space 2210		Type of Mat'l: M	iscellaneous	
Is It Asbestos? Assumed Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:		2 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 36 Description/ Homogeneous Mat'l: Drywall	Location: Office and cubicle space 2210 and Drywall Joint Compound		Type of Mat'l: Mi	iscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Medium Notes:	Sample Results:	Qnty: Good	4014 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spee #: 34	Location: Office and cubicle space 2212		Type of Mat'l: M	iscellaneous	
Description/ Homogeneous Mat'l: 2'x4' Wh Is It Asbestos? No Friable? Yes Potential for Damage: High Notes:	Sample Results: Condition of Mat'l:	- 0	2144 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 02 Func Spee #: 34 Location: Office and cubicle space 2212	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Linoleum - White stone pattern Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Condition of Ma Notes:	- •	450 Ln. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 34 Location: Office and cubicle space 2212 Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard		Type of Mat'l: Misc	cellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Condition of Ma	- ·	432 Ln. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 34 Location: Office and cubicle space 2212 Description/ Homogeneous Mat'l: Fire Door		Type of Mat'l: Misc	cellaneous	
Is It Asbestos? Assumed Friable? No Sample Results: Potential for Damage: Low Condition of Ma Notes:		3 Each	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 34 Location: Office and cubicle space 2212		Type of Mat'l: Misc	cellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Condition of Ma Notes:	Qnty:	3888 Sq. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 28 Location: Office and cubicle space DOE Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	E OIG Audit Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Condition of Ma Notes:		761 Ln. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	

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Floor ID: 02 Func Spce #: 28 Location: Office and cubicle space DOE OIG Audit	Type of Mat'l: Miscellaneous		
Description/ Homogeneous Mat'l: Linoleum - White stone pattern Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Condition of Mat'l: Good Notes:	Qnty: 480 Ln. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 28 Location: Office and cubicle space DOE OIG Audit Description/ Homogeneous Mat'l: Fire Door	T	ype of Mat'l: Miscellaneous	
Is It Asbestos? Assumed Friable? No Sample Results: Potential for Damage: Low Condition of Mat'l: Good Notes:	Qnty: 10 Each	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spee #: 28 Location: Office and cubicle space DOE OIG Audit Description/ Homogeneous Mat'l: Sink Undercoat - Gray	T	ype of Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Condition of Mat'l: Good Notes:	Qnty: 8 Sq. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 28 Location: Office and cubicle space DOE OIG Audit Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound	T	ype of Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Condition of Mat'l: Good Notes:	Qnty: 6849 Sq. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	
Floor ID: 02 Func Spce #: 28 Location: Office and cubicle space DOE OIG Audit Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinholes Ceiling Tile	T	ype of Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Condition of Mat'l: Good Notes:	Qnty: 4700 Sq. Ft.	Survey Date: 14-Sep-10 Scope of Survey: Building Wide	

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Floor ID: 02 Func Spce #: 29	Location: Office and cubicle space DOE OIG Investigations	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' V	White w/Divots and Pinholes Ceiling Tile				
Is It Asbestos? No Friable? Yes Potential for Damage: High	Sample Results: None Detected Condition of Mat'l: Good	Qnty:	2237 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 29	Location: Office and cubicle space DOE OIG Investigations		Type of I	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywa	and Drywall Joint Compound				
Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results: m	Qnty:	4212 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 29 Description/ Homogeneous Mat'l: 4" Date of the control of the cont	Location: Office and cubicle space DOE OIG Investigations k Gray Baseboard		Type of I	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results: Condition of Mat'l: Good	Qnty:	468 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:	To the community of the property of the		T 0.1	or at all	
Floor ID: 02 Func Spce #: 29 Description/ Homogeneous Mat'l: Linole	Location: Office and cubicle space DOE OIG Investigations um - White stone pattern		Type of I	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results:	Qnty:	532 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 29	Location: Office and cubicle space DOE OIG Investigations		Type of I	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Fire D	oor				
Is It Asbestos? Assumed Friable? No Potential for Damage: Low	Sample Results: Condition of Mat'l: Good	Qnty:	7 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					

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Floor ID: 02 Func Spce #: 38 Location: Office		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Con Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	4230 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 38 Location: Office Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pink			Type of	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:		Qnty:	2600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spee #: 38 Location: Office Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	space 2002		Type of	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	470 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 38 Location: Office Description/ Homogeneous Mat'l: Linoleum - White stone pattern	•		Type of	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	352 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 38 Location: Office	space 2002		Type of	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Fire Door Is It Asbestos? Assumed Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	7 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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•	ocation: Office space 2014	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywall and	Drywall Joint Compound				
Is It Asbestos? No Friable? No Sa Potential for Damage: Medium	imple Results: Condition of Mat'l:	- •	2331 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spee #: 37 Lo	ocation: Office space 2014		Type of Mat'l: Mis	cellaneous	
Description/ Homogeneous Mat'l: 2'x4' White v	w/Divots and Pinholes Ceiling Tile				
Is It Asbestos? No Friable? Yes Sa Potential for Damage: High Notes:	mple Results: Condition of Mat'l:	- •	2431 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 37 Lo	ocation: Office space 2014		Type of Mat'l: Mis	cellaneous	
Description/ Homogeneous Mat'l: 4" Dark Gra	y Baseboard				
Is It Asbestos? No Friable? No Sa Potential for Damage: Low	mple Results: Condition of Mat'l:	- •	259 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 37 Lo	ocation: Office space 2014		Type of Mat'l: Mis	cellaneous	
Description/ Homogeneous Mat'l: Fire Door					
Potential for Damage: Low	mple Results: Condition of Mat'l:		4 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
1	ocation: Office space 2043		Type of Mat'l: Mis	cellaneous	
Description/ Homogeneous Mat'l: Drywall and	Drywall Joint Compound				
Is It Asbestos? No Friable? No Sa Potential for Damage: Medium	mple Results: Condition of Mat'l:	- •	2268 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					

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Floor ID: 02 Func Spce #: 30	Location: Office space 2043			Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' V	White w/Divots and Pinhol	les Ceiling Tile					
Is It Asbestos? No Friable? Yes Potential for Damage: High	Sample Results:	Condition of Mat'l:	Good	Qnty:	864 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							
Floor ID: 02 Func Spee #: 30	Location: Office sp	ace 2043			Type of	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: 4" Dar	k Gray Baseboard						
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l:	Good	Qnty:	252 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							
Floor ID: 02 Func Spee #: 30 Location: Office space 2043 Description/ Homogeneous Mat'l: Fire Door				Type of Mat'l: Miscellaneous			
Is It Asbestos? Assumed Friable? No Potential for Damage: Low Notes:	Sample Results:	Condition of Mat'l:	Good	Qnty:	4 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 31	Location: Office sp	ace 2047			Type of	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: 4" Dar	_				-J.F. 3-1		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results:	Condition of Mat'l:	Good	Qnty:	64 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 31	Location: Office sp	ace 2047			Type of	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Fire D	oor						
Is It Asbestos? Assumed Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l:	Good	Qnty:	1 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:							

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Floor ID: 02 Func Spce #: 31	Location: Office sp	ace 2047	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 2'x4' V	White w/Divots and Pinho	les Ceiling Tile				
Is It Asbestos? No Friable? Yes Potential for Damage: High	Sample Results:	Condition of Mat'l: Good	- •	247 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:						
Floor ID: 02 Func Spce #: 31	Location: Office sp	ace 2047		Type of Mat	'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywa	all and Drywall Joint Comp	oound				
Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results: m	Condition of Mat'l: Good		576 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 32	Location: Office sp	aces 2048 and 2044		Type of Mat	'l:	
Description/ Homogeneous Mat'l: No Ac	cess					
Is It Asbestos? Friable? Potential for Damage:	Sample Results:	Condition of Mat'l:	Qnty:		Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:						
Floor ID: 02 Func Spce #: 22	Location: Room 24	05	Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: 4" Dar	k Gray Baseboard					
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results:	Condition of Mat'l: Good	- •	214 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:						
Floor ID: 02 Func Spce #: 22	Location: Room 24	05		Type of Mat	'l: Miscellaneous	
Description/ Homogeneous Mat'l: 2'x4' V	White w/Divots and Pinho	les Ceiling Tile				
Is It Asbestos? No Friable? Yes Potential for Damage: High	Sample Results:	Condition of Mat'l: Good	- •	1800 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:						

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Floor ID: 02 Func Spce #: 22	Location: Room 2405			Type of Mat'l: Miscellaneous		
Description/ Homogeneous Mat'l: Drywa Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results:	~ .	1926 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 45 Location: South Stairwell Description/ Homogeneous Mat'l: 24"x24" Flooring - Gray			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l:	- •	305 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 45 Location: South Stairwell Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results: Condition of Mat'l:		1115 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 45 Location: South Stairwell Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinholes Ceiling Tile			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? Yes Potential for Damage: High Notes:	Sample Results: Condition of Mat'l:	- •	400 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 45	Location: South Stairwell		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Stair T Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l:	- 0	208 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 02 Func Spce #: 45	Location: South Stairwell		Type of Mat'l: Miscellaneous		
Description/ Homogeneous Mat'l: 4" Dar	c Gray Baseboard				
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results: Condition of	Qnty	: 130 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 47	Location: West Stairwell		Type of Mat'l: M	liscellaneous	
Description/ Homogeneous Mat'l: Stair T	read - Gray				
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results: Condition of	Qnty	: 124 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 47	Func Spce #: 47 Location: West Stairwell Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: Linole	ım - Orange stone pattern				
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results: Condition of	Qnty	: 10 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 47 Location: West Stairwell Type of Mat'l: Miscellaneous			liscellaneous		
Description/ Homogeneous Mat'l: Linole	ım - Gray stone pattern				
Is It Asbestos? No Friable? No Potential for Damage: Low	Sample Results: Condition of	Qnty	: 200 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					
Floor ID: 02 Func Spce #: 47	Location: West Stairwell		Type of Mat'l: M	liscellaneous	
Description/ Homogeneous Mat'l: Drywa	ll and Drywall Joint Compound				
Is It Asbestos? No Friable? No Potential for Damage: Mediu	Sample Results: Condition of	Qnty:	: 1952 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Notes:					

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Floor ID: 02 Func Spce #: 47	Location: West Stairwell Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: Linole Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	~ .	80 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 47 Description/ Homogeneous Mat'l: 4" Dar	Location: West Stairwell k Gray Baseboard		Type of Mat'l: Miso	cellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:		130 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 47 Description/ Homogeneous Mat'l: Stair T	Location: West Stairwell		Type of Mat'l: Miso	cellaneous	
Is It Asbestos? No Friable? No Potential for Damage: Low Notes: 1st Floor only	Sample Results: None Detected Condition of Mat'l:	- •	56 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 47 Description/ Homogeneous Mat'l: 12"x12	Location: West Stairwell		Type of Mat'l: Miscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes: 1st Floor only	Sample Results: None Detected Condition of Mat'l:	- •	100 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 02 Func Spce #: 47	Location: West Stairwell		Type of Mat'l: Miscellaneous		
Description/ Homogeneous Mat'l: 24"x24 Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:		106 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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•	Womens Restroom	Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: 4" Dark Gray Baseboa Is It Asbestos? No Friable? No Sample Re Potential for Damage: Low Notes:		Qnty:	66 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 43 Location: Womens Restroom Description/ Homogeneous Mat'l: 4" Chocolate Baseboard			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? No Sample Re Potential for Damage: Low Notes:	sults: Condition of Mat'l: Good	Qnty:	40 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 43 Location: Womens Restroom Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinholes Ceiling Tile			Type of Mat'l: Miscellaneous			
Is It Asbestos? No Friable? Yes Sample Re Potential for Damage: High Notes:	sults: Condition of Mat'l: Good	Qnty:	1250 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 02 Func Spce #: 43 Location: Womens Restroom Description/ Homogeneous Mat'l: Drywall and Drywall Joint Compound			Type of	Mat'l: Miscellaneous		
Is It Asbestos? No Friable? No Sample Re Potential for Damage: Medium Notes:		Qnty:	1926 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
-	3rd Floor Halls	Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: 2'x4' White w/Divots a Is It Asbestos? No Friable? Yes Sample Re Potential for Damage: High Notes:		Qnty:	2400 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 03 Func Spce #: 20	Location: 3rd Floor Halls		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Drywa Is It Asbestos? No Friable? No Potential for Damage: Mediu Notes:	Sample Results:		3600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 20 Description/ Homogeneous Mat'l: 4" Dar	Location: 3rd Floor Halls k Gray Baseboard		Type of Mat'l: M	iscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	- •	800 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 14 Description/ Homogeneous Mat'l: 4" Dar	Location: Central Break Room k Gray Baseboard		Type of Mat'l: Mi	iscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:	- •	180 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 14 Description/ Homogeneous Mat'l: 2'x4' V	Location: Central Break Room /hite w/Divots and Pinholes Ceiling Tile		Type of Mat'l: Mi	iscellaneous		
Is It Asbestos? No Friable? Yes Potential for Damage: High Notes:	Sample Results: Condition of Mat'l:	Qnty: Good	2000 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spee #: 14	Location: Central Break Room		Type of Mat'l: Mi	iscellaneous		
Description/ Homogeneous Mat'l: Linole Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l:		800 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 03 Func Spce #: 14	Location: Central Break Room		Type of Mat'l: Miscellaneous			
Description/ Homogeneous Mat'l: Lind Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected		1280 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 14 Description/ Homogeneous Mat'l: Line	Location: Central Break Room		Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected Condition of Mat'l:	- •	10 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 14 Description/ Homogeneous Mat'l: Dry	Location: Central Break Room wall and Drywall Joint Compound		Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Med Notes:	Sample Results: Condition of Mat'l:	- •	1800 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 19 Description/ Homogeneous Mat'l: Fire	Location: Mechanical Room Stop - Red		Type of Mat'l:	Miscellaneous		
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: None Detected	- •	5 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	
Floor ID: 03 Func Spce #: 19	Location: Mechanical Room		Type of Mat'l:	Miscellaneous		
Description/ Homogeneous Mat'l: Fire Is It Asbestos? Assumed Friable? No Potential for Damage: Low Notes:	Sample Results:		6 Each	Survey Date: Scope of Survey:	14-Sep-10 Building Wide	

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Floor ID: 03 Func Spce #: 19 Location: Mechanic			Type of M	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Comp Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	2000 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 15 Location: Mens Res Description/ Homogeneous Mat'l: Drywall and Drywall Joint Comp			Type of M	/Iat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	1600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 15 Location: Mens Res Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinhol			Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l: Good	Qnty:	600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 15 Location: Mens Res Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	stroom		Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	60 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 18 Location: OIG Office Description/ Homogeneous Mat'l: Linoleum - Gray stone pattern	ce and Cubicle area 3016		Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	1775 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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	rice and Cubicle area 3016		Type of M	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	46341 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 18 Location: OIG Off Description/ Homogeneous Mat'l: 4" Dark Gray Baseboard	ice and Cubicle area 3016		Type of N	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Low Notes:	Condition of Mat'l: Good	Qnty:	5150 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 18 Location: OIG Off Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho	ice and Cubicle area 3016		Type of M	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: No Potential for Damage: High Notes:	one Detected Condition of Mat'l: Good	Qnty:	264500 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spce #: 17 Location: SW Offin Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinho	•		Type of N	Mat'l: Miscellaneous	
Is It Asbestos? No Friable? Yes Sample Results: Potential for Damage: High Notes:	Condition of Mat'l: Good	Qnty:	8622 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide
Floor ID: 03 Func Spee #: 17 Location: SW Office			Type of M	Mat'l: Miscellaneous	
Description/ Homogeneous Mat'l: Drywall and Drywall Joint Com Is It Asbestos? No Friable? No Sample Results: Potential for Damage: Medium Notes:	Condition of Mat'l: Good	Qnty:	13311 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide

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Floor ID: 03 Func Spce #: 17	Location: SW Office Space 3041		Type of Mat'l: Miscellaneous				
Description/ Homogeneous Mat'l: 4" Dar Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Gray Baseboard Sample Results: Condition of Mat'l:	- •	1479 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide		
Floor ID: 03 Func Spce #: 16 Description/ Homogeneous Mat'l: Drywa	Location: Womens Restroom		Type of Mat'l:	Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Medium Notes:	Sample Results: Condition of Mat'l:	- •	1600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide		
Floor ID: 03 Func Spce #: 16 Description/ Homogeneous Mat'l: 2'x4' W	Floor ID: 03 Func Spce #: 16 Location: Womens Restroom Description/ Homogeneous Mat'l: 2'x4' White w/Divots and Pinholes Ceiling Tile Type of Mat'l: Miscellaneous						
Is It Asbestos? No Friable? Yes Potential for Damage: High Notes:	Sample Results: Condition of Mat'l:	- •	600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide		
Floor ID: 03 Func Spce #: 16 Description/ Homogeneous Mat'l: 4" Cho	Location: Womens Restroom colate Baseboard		Type of Mat'l:	Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Low Notes:	Sample Results: Condition of Mat'l:		60 Ln. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide		
Floor ID: ROOF Func Spce #: 44 Description/ Homogeneous Mat'l: Rolled	Location: Roof		Type of Mat'l:	Miscellaneous			
Is It Asbestos? No Friable? No Potential for Damage: Low Notes: Partly under built up roof	Sample Results: None Detected Condition of Mat'l:	- •	61600 Sq. Ft.	Survey Date: Scope of Survey:	14-Sep-10 Building Wide		

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Floor ID: ROOF	Func	Spce #: 44	Location: Roo	Type of Mat'l: Miscellaneous					
Description	on/ Home	ogeneous Mat'	1: Rolled Asphalt Roofing - W	Valking Path					
Is It Asbestos?	No	Friable? 1	No Sample Results	:	Qnty:	1237 Sq. Ft.	Survey Date:	14-Sep-10	
	Potenti	al for Damage	: Low	Condition of Mat'l:	Good		Scope of Survey:	Building Wide	
	Notes:								
Floor ID: ROOF	Func	Spce #: 44	Location: Roo	f	Type of Mat'l: Miscellaneous				
Description	on/ Homo	ogeneous Mat'	l: Flashing Tar - Gray/Black						
Is It Asbestos?	No	Friable?	No Sample Results	: None Detected	Qnty:	12000 Sq. Ft.	Survey Date:	14-Sep-10	
	Potenti	al for Damage	: Low	Condition of Mat'l:	Good		Scope of Survey:	Building Wide	
<u></u>	Notes:								
Floor ID: ROOF	Func	Spce #: 44	Location: Roo	f		Type of 1	Mat'l: Miscellaneous		
Description	on/ Homo	ogeneous Mat'	l: Built Up Roof						
Is It Asbestos?	No	Friable? 1	No Sample Results	:	Qnty:	61600 Sq. Ft.	Survey Date:	14-Sep-10	
	Potenti	al for Damage	: Low	Condition of Mat'l:	Good		Scope of Survey:	Building Wide	
	Notes:								

Appendix B

Management Planner's Recommendations



FUNCTIONAL SPACE HAZARD RANKINGS AND RESPONSE ACTION RECOMMENDATION

Client: GSA

Building: Ward Parkway Federal Building (MO0134)

Inspector: Joshua Ashley

							LEVEL	OF EXPOSU	IRE	Poten ial /			
FLOOR	FUNCTIONAL SPACE ID	MAT. TYPE (T,S,M)	HOMOGENEOUS MATERIAL DESCRIPTION	QUANTITY (SF,LF,FG,EA)	ASBESTOS (Y, N, A)	Friability (Y, N)	Accessibility (L, M, H)	Condition (G, D, S)	Potential for Disturbance (S, D, L)	Type of Damage (C, V, A)	Physical Assess Code	Hazard Rank	Rec. Response Action
01	07	М	Fire Door	1 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
01	10	М	Fire Door	1 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
03	19	М	Fire Door	6 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	26	М	Fire Door	4 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
02	27	М	Fire Door	36 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
02	28	М	Fire Door	10 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	29	М	Fire Door	7 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	30	М	Fire Door	4 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
02	31	М	Fire Door	1 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
02	33	М	Fire Door	16 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	34	М	Fire Door	3 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	36	М	Fire Door	2 EA	Α	N	L	G	s	C,V,A	NA	NA	O&M Required
02	37	М	Fire Door	4 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
02	38	М	Fire Door	7 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required
01	49	М	Fire Door	1 EA	Α	N	L	G	S	C,V,A	NA	NA	O&M Required

10/6/2010



PHYSICAL ASSESSMENT LEGEND AND HAZARD RANKINGS

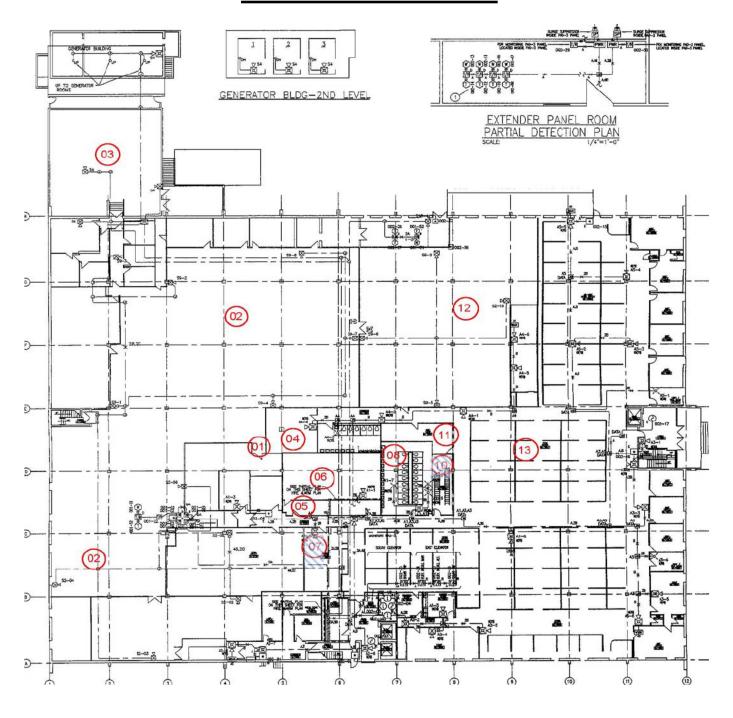
MATERIAL TYPE	MATERIAL QUANTITY	ASBESTOS	FRIABILITY	ACCESSIBILITY	CONDITION
HOMO MAT = Homogeneous Material	SF = Square Feet	Y = Yes	Y = Yes	L = Low	G = Good
MAT TYPE = Material Type	LF = Linear Feet	N = No	N = No	M = Moderate	D = Damaged
T = Thermal	FG = Fitting	A = Assumed		H = High	S = Significantly Damaged
s = Surfacing	EA = Each				
M = Miscellaneous					

POTENTIAL FOR DISTURBANCE	POTENTIAL / TYPE OF DAMAGE	PHYSICAL ASSESSMENT
S = Significant Potential for Damage	C = Contact	1 = Damaged or significantly damaged friable suspect thermal system insulation
D = Damage	V = Vibration	2 = Damaged friable suspect surfacing ACM
L = Low Potential for Damage	A = Air Erosion	3 = Significantly damaged friable suspect surfacing ACM
		4 = Damaged or significantly damaged friable miscellaneous suspect ACM
		5 = Suspect ACM with potential for damage
		6 = Suspect ACM with potential for significant damage
		7 = Any remaining friable suspect ACM

HAZARD RANK ABATEMENT PRIORITY	ACM CONDITION	RECOMMENDED RESPONSE ACTION
1	Damaged or Significantly Damaged Friable Thermal System Insulation	Evacuate or isolate the area if needed. Remove the ACM (or enclose or encapsulate if sufficient to contain fibers). Repair of thermal system insulation is allowed if feasible and safe. O&M required for all ACM.
2	Damaged Friable Surfacing Material	Evacuate or isolate the area if needed. Remove, enclose, encapsulate or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all ACM.
3	Significantly Damaged Friable Surfacing Material	Evacuate or isolate the area if needed. Remove, enclose, encapsulate or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all ACM.
4	Damaged or Significantly Damaged Friable Miscellaneous ACM	Remove, enclose, encapsulate or repair to correct damage. O&M required for all ACM.
5	ACM with potential for Damage	Take steps to reduce potential for disturbance. O&M required for all ACM.
6	ACM with potential for Significant Damage	Take steps to reduce potential for disturbance. O&M required for all ACM.
7	All Remaining Friable ACM	O&M Required for all ACM.
NA	Not Applicable	O&M Required.

Appendix (c C
Floor Plans	ans

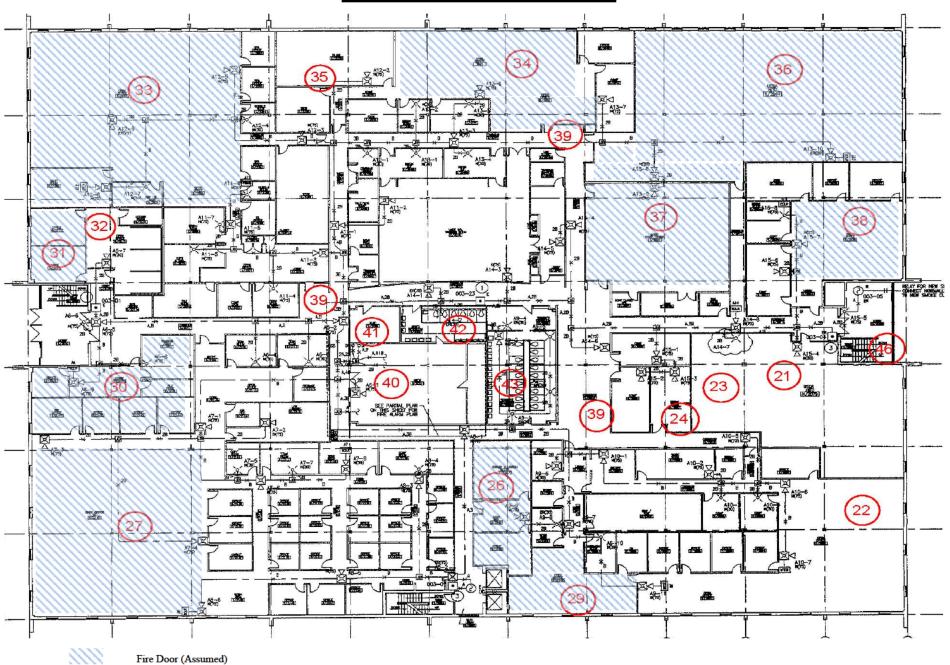
Asbestos Locations - First Floor



1111.

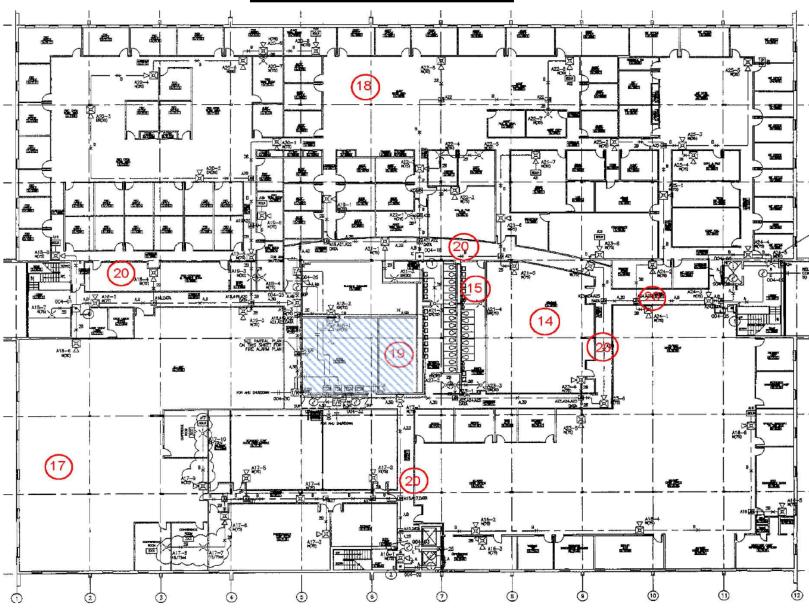
Fire Door (Assumed)

Asbestos Locations - Second Floor

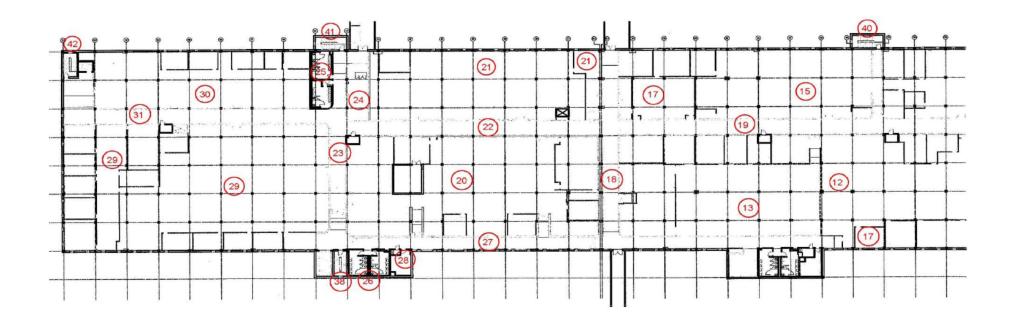


Fire Door (Assumed)

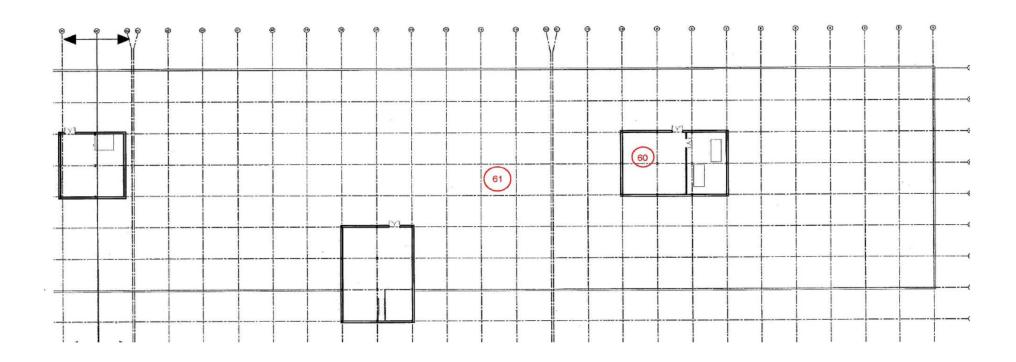
Asbestos Locations - Third Floor



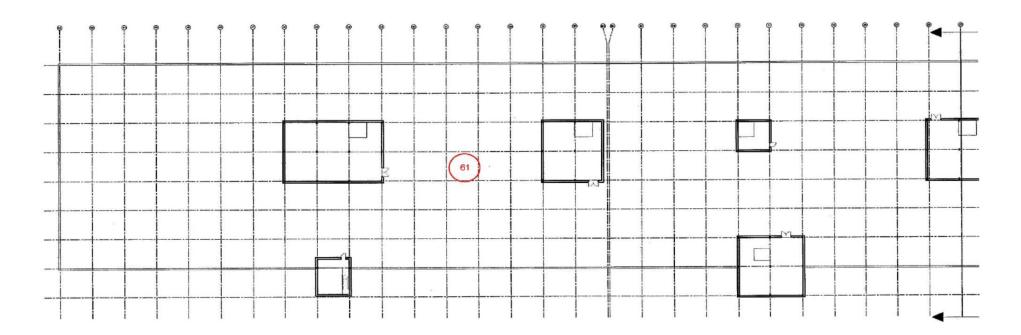
Asbestos Locations - Second Floor South NO ACM Detected



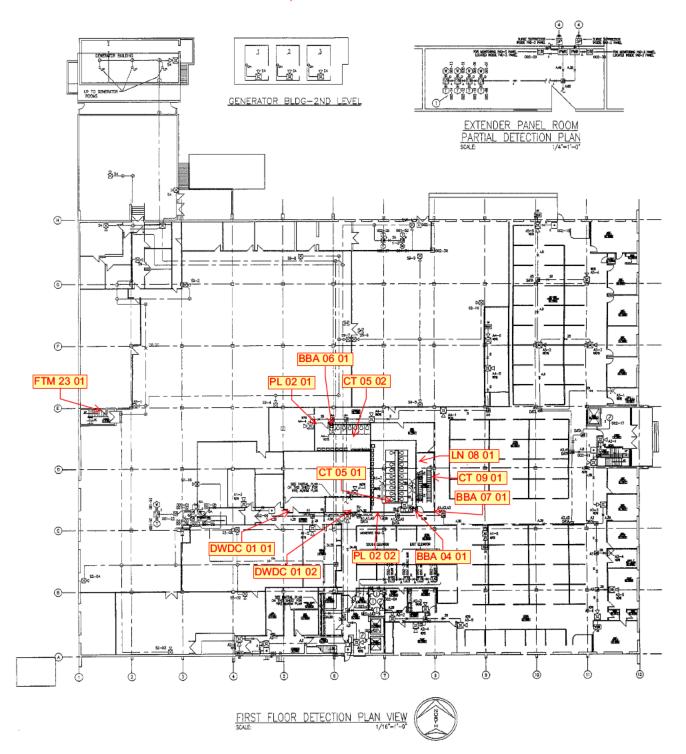
Asbestos Locations - Roof/Penthouse North NO ACM Detected

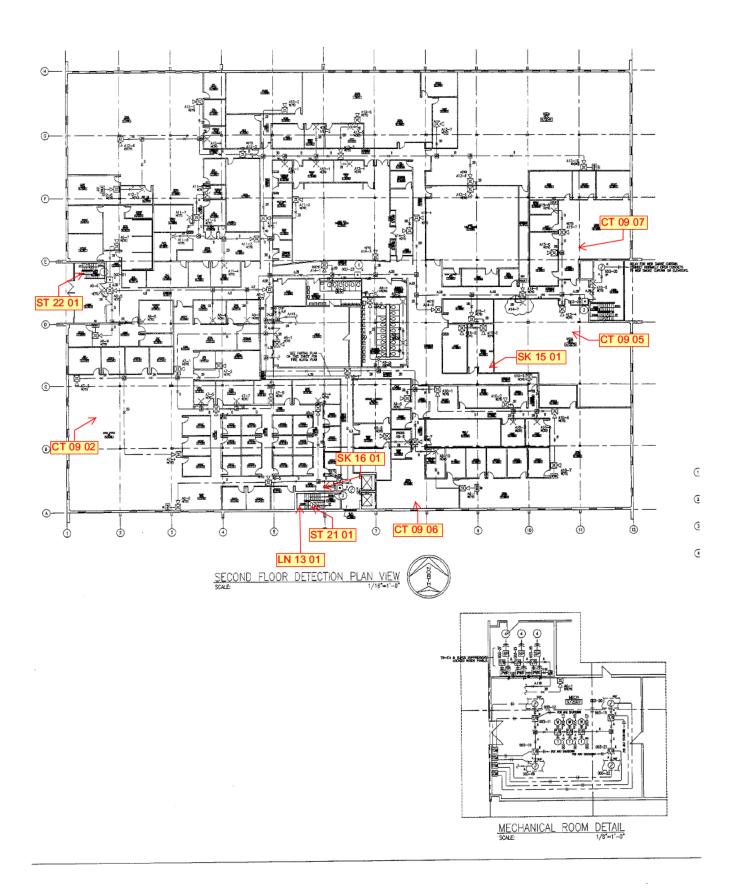


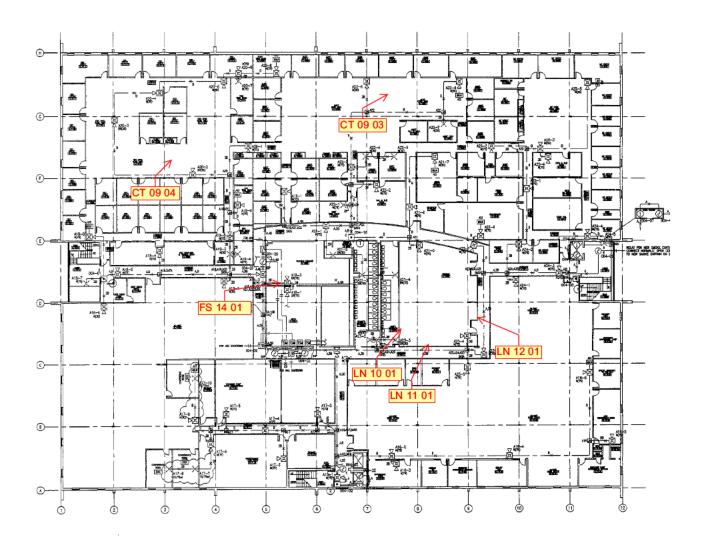
Asbestos Locations - Roof/Penthouse South NO ACM Detected



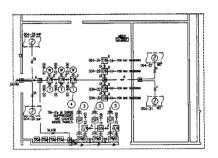
Asbestos Bulk Sample Locations MO.0134 First Floor











MECHANICAL ROOM DETAIL

Appendix D

O&M Procedures

O&M PROCEDURES

1.0 OVERVIEW

This section briefly describes the OSHA classifications of asbestos work. In addition, brief descriptions outlining the steps necessary to ensure that safe work practices and safe handling of asbestos-containing materials are properly implemented and included.

The OSHA Construction Standard [Title 29, CFR Part 1926.1101] provides detailed work practice and engineering control requirements based on four classifications of asbestos work. In general, Class I work poses the greatest risk and Class IV poses the least. The classes are summarized below:

- a) **Class I**: Activities involving the removal of thermal system insulation (TSI) and sprayedon, troweled-on, or otherwise applied surfacing ACM and PACM applied to surfaces, pipes and boilers. Class I work is generally accomplished by licensed, professional asbestos abatement contractors.
- b) **Class II**: Activities involving the removal of asbestos-containing floor tile and associated mastics, wallboard, joint compounds, sheet flooring, roofing, transite, gaskets, and similar materials.
- c) Class III: Repair and maintenance operations where ACM (including TSI and surfacing ACM and PACM) are likely to be disturbed. Examples of Class III asbestos work include disturbance and repair of small amounts of pipe insulation in the course of repairing a leaking valve; removal of small amounts of an ACM wall to repair electrical wiring; and removal of floor tile and mastic loosened by water damage.
- d) Class IV: Custodial, maintenance, and construction activities during which employees contact, but do not disturb ACM or PACM; this also include activities to clean up waste and debris that may contain ACM or PACM. Examples include cleaning ACM floors, working around electrical and HVAC equipment; and dusting/vacuuming in areas where ACM pipe insulation is present.

2.0 WORK PRACTICES

Each ACM identified warrants a specific work practice to control exposure. These work practices include routine maintenance, patch and repair, encapsulation, enclosure, and removal. Any of these work practices may disturb or dislodge ACM or render the material friable and, therefore, safe work practices must be followed. The applicable regulations that outline such safe work practices and abatement strategies can be found in the following regulations:

a) Worker Protection Standards, Construction Industry OSHA 29 CFR 1926.1101

b) Worker Protection Standards, General Industry OSHA 29 CFR 1910.1001

c) Federal Asbestos Abatement Regulations EPA NESHAP 40 CFR 61 Subpart M

d) Federal Asbestos Regulations EPA AHERA 40 CFR Part 763

e) **Asbestos Worker Protection Rule** EPA AHERA 40 CFR Part 763, Subpart G

These regulations, combined with the OSHA and EPA mandated training, are designed to protect workers and control the disturbance/release of airborne asbestos, materials, and debris into the environment.

2.1 Class I Removal Work (Pipe Insulation, Pipe Fittings, Tank Insulation, Boiler Insulation, Fireproofing, etc.)

It is recommended that this type of asbestos removal work be contracted out to professional, licensed asbestos abatement contractors.

2.2 Class II Removal Work (Floor Tile and Mastics, Wallboard and Joint Compounds, Sheet Flooring, Roofing, Transite and Gaskets, etc.)

It is recommended that this type of work by conducted by 32-hour trained personnel overseen by a 40-hour trained supervisor.

The following are general requirements for the removal of these materials:

- a) Supervision by a Competent Person as defined by OSHA.
- b) Critical barriers covering all openings in the regulated area.
- c) Polyethylene sheeting (6-mil) covering all surfaces beneath the removal area.
- d) HEPA filtration with local exhaust to the building exterior.
- e) Enclosure or isolation of the work area.
- f) Wet removal methods wherever feasible.
- g) Removal by non-aggressive (non-mechanical) means.
- h) Waste double-bagged in 6-mil polyethylene sheeting and labeled with Generator and DOT labels.

2.3 Class III Removal Work - Small-Scale, Short-Duration Operations, and Maintenance and Repair (O&M) Activities.

This work must be conducted by personnel with a minimum of 16-hour O&M training. Small-scale, short-duration is generally defined as removal of a quantity of ACM equal to or less than that which can be removed with a single glovebag, or, 3 square feet or 3 lineal feet.

Small-scale, short-duration renovation and maintenance activities are tasks such as, but not limited to:

- a) Removal of small quantities of asbestos-containing insulation on pipes or tanks.
- b) Removal of small quantities of asbestos-containing fireproofing on beams or above ceilings.
- c) Replacement of an asbestos-containing gasket on a valve.
- d) Installation or removal of a small section of drywall.
- e) Installation of electrical conduits through or in close proximity to ACM.
- f) Installation or removal of a small section of floor tile and mastic.
- g) Maintenance on asbestos-containing or presumed asbestos-containing fire doors.

Refer to Section 4.7 for procedures for Class III O&M activities.

2.4 Class IV Removal Work - Maintenance and custodial construction activities during which employees contact, but do not disturb ACM or PACM.

- a) This work shall be conducted by employees trained to the asbestos awareness level or greater.
- b) Employees who clean up debris shall assume the debris contains asbestos if the debris is located in areas of accessible thermal system insulation and/or surfacing material. All clean up of debris containing or presumed as ACM, shall be done promptly using wet methods and HEPA vacuums.
- c) Employees cleaning up debris and waste in a regulated area where respirators are required shall wear respirators which are selected based upon hazard level, used, and fitted in accordance with OSHA and National Institute for Occupational Safety and Health (NIOSH).

3.0 SPECIFIC PROCEDURES FOR THE MAINTENANCE OF ASBESTOS-CONTAINING FLOOR TILE

- a) All floor tiles, 9"x 9" and 12"x 12", must be assumed to be asbestos-containing unless proven otherwise. Only if testing has determined floor tiles to be non-asbestos-containing may they be handled by non-certified persons.
- b) Under no circumstances should broken or crumbled asbestos tiles be swept or cleaned up by non-certified maintenance or custodial persons. The GSA Asbestos Program Manager should be contacted to arrange for the cleanup of any asbestos-containing tile.
- c) There is generally not a hazard associated with asbestos-containing tile that is cracked as long as it is still properly adhered to the floor. However, the condition of cracked asbestoscontaining tile should be monitored closely.

- d) If asbestos-containing tiles are delaminating or are loose, they may be re-glued. Depending on the situation and condition of the tile, tiles needing to be removed/disposed of should be handled by asbestos trained personnel.
- e) No buffing shall be performed on asbestos-containing tiles that have not been sealed or finished in some manner. Dry buffing shall be performed only after sufficient coats of sealer or finish have been applied to protect the tile from being disturbed. Use the least abrasive pad possible to protect against breaking through the finish and disturbing the surface of the tile.
- f) If during buffing, asbestos floor tile is dislodged or broken, stop work and contact the Asbestos Program Manager immediately to schedule the proper clean up of the tile.
- g) Stripping of asbestos-containing floor tile shall be done wet. At no time will dry stripping be allowed. If during the stripping procedure the asbestos-containing tiles become dislodged, stop the procedure and notify the Asbestos Program Manager immediately.
- h) During buffing or stripping of asbestos-containing floor tiles, the least abrasive pad should be used at a speed of no greater than 300 rpm.

4.0 PROCEDURES FOR CLASS III O&M ACTIVITIES

- The first step in preparing to perform a small-scale, short-duration O&M task, regardless of the method that will be used, is the removal of all movable objects from the work area to protect them from asbestos contamination. If objects have already been contaminated, they should be thoroughly cleaned with a HEPA filtered vacuum or be wet-wiped before they are removed from the work area. Objects that cannot be removed should be thoroughly cleaned with a HEPA filtered vacuum or be wet-wiped and covered completely with 6-mil-thick polyethylene plastic sheeting before the task begins.
- b) Install critical barriers covering all openings in the regulated area.
- c) Place polyethylene sheeting (6-mil) covering all surfaces beneath the removal area.
- d) Install HEPA filtration with local exhaust to the building exterior if feasible. If using a mini-containment, a hepa-vacuum may be adequate to supply negative pressure.
- e) Ensure enclosure or isolation of the work area.
- f) The work shall be performed using wet methods.
- g) Where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of thermal system insulation or surfacing material, the employer shall use impermeable dropcloths, and shall isolate the operation using mini-enclosures or glove bag systems or another isolation method.

h) Employees performing Class III jobs shall wear respirators which are selected based upon hazard level, and used, fitted in accordance with OSHA and NIOSH, whenever there is disturbance of thermal system insulation or surfacing material, or where the employer does not produce a "negative exposure assessment" or where monitoring results show a Permissible Exposure Limit (PEL) or Excursion Limit has been exceeded.

4.1 Wet methods

Whenever feasible, and regardless of the abatement method to be used (e.g., removal, enclosure, use of glove bags), wet methods must be used during small-scale, short-duration maintenance and renovation activities that involve disturbing ACM. Handling ACM wet is one of the most reliable methods of minimizing the potential for asbestos fibers to become airborne. Wet methods can be used in the great majority of workplace situations. Only in cases where asbestos work must be performed on live electrical equipment, on live steam lines, or in other areas where water will seriously damage materials or equipment may dry removal be performed. Amended water or another wetting agent should be applied by means of an airless sprayer to minimize the extent to which the ACM is disturbed. ACM should be wetted at the initiation of the maintenance or renovation operation, and continually throughout the work period to ensure that any dry ACM exposed in the course of the work remains wet until final disposal.

4.2 Removal or repair of small quantities of ACM.

Several methods can be used to remove or repair small amounts of ACM during O&M tasks. These include the use of glove bags and the construction of mini-enclosures. The procedures that employers must use for each of these operations are described in the following sections.

4.3 Glove bags

Glove bags for O&M activities are approximately 40-inch-wide by 64-inch-long bags fitted with arms through which the work can be performed. When properly installed and used, they permit workers to remain completely isolated from the asbestos material being removed inside the bag. Glove bags can thus provide a flexible, easily installed, and quickly dismantled temporary small work area enclosure that is ideal for small-scale asbestos renovation or maintenance jobs. These bags are single-use control devices that are disposed of at the end of each task. The bags are made of transparent 6-mil polyethylene plastic with arms of spun-bonded polyolefin material (the same material used to make the disposable protective suits used in major asbestos removal operations and in protective gloves). Glove bags are readily available from safety supply stores or specialty asbestos removal supply houses. Glove bags come pre-labeled with the asbestos warning labels required by OSHA, Department of Transportation (DOT), and EPA for bags used to transport and dispose of asbestos waste.

Supplies and materials that are necessary for the use of glove bags include:

a) Tape to seal glove bag to the area from which asbestos is to be removed.

- b) Amended water (water with an added surfactant) or other wetting materials.
- c) An airless sprayer for the application of amended water.
- d) Bridging encapsulant (a paste-like substance for coating asbestos) to seal the rough edges of any ACM that remains within the glove bag at the points of attachment after the rest of the asbestos has been removed.
- e) Tools such as razor knives, nips, and wire brushes (or other tools suitable for cutting wires, etc.).
- f) A HEPA filter-equipped vacuum for evacuating the glove bag (to minimize the release of asbestos fibers) during removal of the bag from the work area and for cleaning any material that may have escaped during the installation of the glove bag.
- g) HEPA filtered or more protective respirators for use by the employees involved in the removal of asbestos with the glove bag.

Glove bag work practices.

The proper use of glove bags requires the following steps:

- i. Glove bags must be installed so that they completely cover the pipe or other structure where asbestos work is to be done. Glove bags are installed by cutting the sides of the glove bag to fit the size of the pipe from which asbestos is to be removed. The glove bag is attached to the pipe by folding the open edges together and securely sealing them with tape. All openings in the glove bag must be sealed with duct tape or equivalent material.
- ii. The employee performing the asbestos removal with the glove bag must don at least a half face HEPA-equipped respirator. Respirators must be worn by employees who are in close contact with the glove bag and who may thus be exposed as a result of small gaps in the seams of the bag or holes punched through the bag by a razor knife or a piece of wire mesh.
- iii. The removed asbestos material from the pipe or other surface must be adequately wetted with amended water applied with an airless sprayer through the precut port provided in most glovebags or applied through a small hole in the bag.
- iv. Once the ACM has been adequately wetted, it can be removed from the pipe, beam, or other surface. The tool used to remove the ACM depends on the type of material to be removed. ACM is generally covered with painted canvas and/or wire mesh. Painted canvas can be cut with a razor knife and peeled away from the ACM underneath. Once the canvas has been peeled away, the ACM underneath may be dry, in which case it should be re-sprayed with amended water to ensure that it generates as little dust as possible when removed. If the ACM is covered with wire mesh, the mesh should be cut with nips, tin snips, or other appropriate tool and removed. Amended water must then be used to spray any layer of dry material that is exposed beneath the mesh, the surface of the stripped underlying structure, and the inside of the glove bag.

- v. After removing the layer of ACM, the pipe or surface from which asbestos has been removed must be thoroughly cleaned with a brush and wet-wiped with amended water until no traces of the ACM can be seen.
- vi. Any asbestos-containing insulation edges that have been exposed as a result of the removal or maintenance activity must be encapsulated with bridging encapsulant to ensure that the edges do not release asbestos fibers to the atmosphere after the glove bag has been removed.
- vii. When the asbestos removal and encapsulation have been completed, a vacuum hose from a HEPA-filtered vacuum must be inserted into the glove bag through the port to remove any air in the bag that may contain asbestos fibers. When the air has been removed from the bag, the bag should be squeezed tightly (as close to the top as possible), twisted, and sealed with tape, to keep the removed materials safely in the bottom of the bag. The HEPA vacuum can then be removed from the bag and the glove bag itself can be removed from the work area to be disposed of properly.

4.4 Mini-Enclosures

In some instances a glove bag may not be either large enough or the proper shape to enclose the work area. In such cases, a mini-enclosure can be built around the area where small-scale, short-duration asbestos maintenance or renovation work is to be performed. Such enclosures should be constructed of 6-mil polyethylene plastic sheeting and be small enough to restrict entry to the asbestos work area to one worker.

For example, a mini-enclosure can be built in a small utility closet when asbestos-containing drywall or drywall joint compound is to be removed. The enclosure is constructed by:

- a) Affixing 6-mil polyethylene sheeting to the walls with spray adhesive and tape.
- b) Covering the floor with 6-mil polyethylene sheeting and sealing the plastic covering the floor to the outside of the plastic on the walls.
- c) Sealing any penetrations such as pipes or electrical conduits with tape; and using a HEPA vacuum to maintain negative pressure inside the work area.
- d) Constructing a small change room (approximately 3 feet square) made of 6-mil polyethylene plastic supported by 2-inch by 4-inch lumber (the plastic should be attached to the lumber supports with staples or spray adhesive and tape). The change room should be contiguous to the mini-enclosure, and is necessary to allow the worker to vacuum off his protective coveralls and remove them before leaving the work area. While inside mini-enclosure, the worker should wear spun-bonded polyolefin disposable coveralls and use the appropriate HEPA-filtered or more protective respiratory protection.

e) The advantages of mini-enclosures are that they limit the spread of asbestos contamination, reduce the potential exposure of bystanders and other workers who may be working in adjacent areas, and are quick and easy to install. The disadvantage of mini-enclosures is that they may be too small to contain the equipment necessary to create a negative pressure within the enclosure; however, the double layer of plastic sheeting will serve to restrict the release of asbestos fibers to the area outside the enclosure.

4.5 Removal of small quantities of asbestos insulated pipes or structures

When pipes are insulated with ACM, removal of the entire pipe may be more protective, easier, and more cost effective than stripping the asbestos insulation from the pipe. Before such a pipe is cut, the asbestos-containing insulation must be wrapped with 6-mil polyethylene plastic and securely sealed with duct tape or equivalent. This plastic covering will prevent asbestos fibers from becoming airborne as a result of the vibration created by the power saws used to cut the pipe. If possible, the pipes should be cut at locations that are not insulated to avoid disturbing the asbestos. If a pipe is completely insulated with ACM, small sections should be stripped using the glovebag method described above before the pipe is cut at the stripped sections.

5.0 ENCLOSURE OF ACM

The decision to enclose rather than remove ACM from an area depends on the owner's preference. Owners consider factors such as cost effectiveness, the physical configuration of the work area, and the amount of traffic in the area when determining which abatement method to use. If enclosure is chosen over removal, a solid structure with airtight walls and ceilings must be built around the ACM or structure to prevent the release of asbestos fibers into the area beyond the enclosure and to prevent the disturbance of these materials by casual contact during future maintenance operations.

Such a permanent (i.e., for the life of the building) enclosure should be built of non-asbestos new construction materials and be impact resistant and airtight. Enclosure walls should be made of tongue-and-groove boards, boards with spine joints, or gypsum boards having taped seams. The underlying structure must be able to support the weight of the enclosure. (Suspended ceilings with laid-in panels do not provide airtight enclosures and should not be used to enclose structures covered with ACM). All joints between the walls and ceiling of the enclosure should be caulked to prevent the escape of asbestos fibers. During the installation of enclosures, tools that are used (such as drills or rivet tools) should be equipped with HEPA-filtered vacuums. Before constructing the enclosure, all electrical conduits, telephone lines, recessed lights, and pipes in the area to be enclosed should be moved to ensure that the enclosure would not have to be reopened later for routine or emergency maintenance. If such lights or other equipment cannot be moved to a new location for logistic reasons, or if moving them will disturb the ACM, removal rather than enclosure of the ACM is the appropriate control method to use.

6.0 OPERATIONS AND MAINTENANCE (O&M) PROGRAM FOR ACM

An asbestos O&M program should be initiated in all facilities that have ACM and/or assumed ACM. Such a program should include:

- a) Development of an inventory of all ACM in the facility.
- b) Periodic examination of all ACM to detect deterioration.
- c) Written procedures for handling ACM during the performance of small-scale, short-duration maintenance and renovation activities.
- d) Written procedures for asbestos disposal.
- e) Written procedures for dealing with asbestos-related emergencies.
- f) Training of staff in safe work procedures.

6.1 Maintenance program for Fire Doors

The following procedures provide general guidance for the maintenance of untested, presumed asbestos-containing fire doors.

- a) Compliance with OSHA, State, and EPA-AHERA regulations require that comprehensive asbestos inspections be completed prior to any renovation or demolition activities in order to protect occupant and worker health. Any service to a presumed asbestos-containing fire door that could potentially disturb the core (i.e. drilling or cutting into the core,) qualifies as repair or maintenance and requires characterization for the presence of asbestos.
- b) In order to comply with the above referenced regulations, employees (i.e custodians, locksmiths, etc.) or outside contractors will not conduct any activity on presumed fire doors that involves drilling, cutting, abrading, or any other disturbance of the core until the presence or absence of asbestos can be verified.
- c) The presence of asbestos cannot be verified by the appearance of the door, nor does the age of the door necessarily indicate whether the door contains asbestos. In the event that a suspect fire door must be serviced and that service may disturb the core of the door, one of the following steps should be followed:
 - i. Presume that the door contains asbestos.
 - ii. Examine the plate or label on the door spine. The door core material may be listed on this plate. The information on the plate may be used to confirm the presence of asbestos, but the plate alone is not sufficient to determine that asbestos is not present.
 - iii. Contact the manufacturer for information on materials used for construction.
 - iv. Have a licensed asbestos inspector sample the door core material in an appropriate manner for the presence of asbestos.
- d) If the doors are asbestos-containing or presumed to contain asbestos, the removal of the door must be conducted by a qualified abatement contractor. Doors containing asbestos

- or presumed to contain asbestos must be disposed of in an appropriate landfill, and cannot be disposed of as normal waste.
- e) If GSA personnel intend to service asbestos-containing or presumed asbestos-containing fire doors, this would be considered a Class III work activity, requiring 16 hours of O&M training, proper equipment, proper PPE (personal protective equipment), and disposal.

6.2 Removal Procedures for Specific Materials

6.2.1Non-Friable Flooring Materials

The following procedures shall be used to remove ACM flooring materials:

- a) Isolate or shut down, lock-out and tag-out HVAC system (and other building systems that may create a hazard during the removal activity) in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.
- b) Regulate and isolate the work area with warning signs, barrier tape, and critical barriers in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.
- c) Upon approval of the work site preparation by consultant or delegated authority, contractor may proceed to remove the material using the below listed procedures.
- d) Place tools, equipment and materials needed in work area.
- e) Spray amended water onto ACM prior to start of removal.
- f) Do not cut, abrade, or break ACM.
- g) Dry sweeping is prohibited.
- h) All scraping of residual adhesive and/or backing shall be performed using wet methods.
- i) Removal of flooring by mechanical means is prohibited.
- j) Tiles shall be removed intact, unless intact removal is not possible.
- k) When tiles are heated and can be removed intact, wetting may be omitted
- 1) Do not allow ACM to drop from elevated heights. Always carry disposal bag to the ground; do not drop.
- m) If material can cut through the disposal bags, place ACM into one 6 mil bag and then into barrels or fiber drums.
- n) Clean up any debris or dust using HEPA vacuuming and wet wiping.
- o) Notify consultant or delegated authority that work is complete so that a visual inspection and any clearance air monitoring can be conducted if required.
- p) Upon passage of the visual inspection and clearance air monitoring (if conducted), warning signs, barrier tape, and critical barriers may be removed.

6.2.2 Miscellaneous Non-Friable Materials

The following procedures shall be used to remove other non-friable ACM:

a) Isolate or shut down, lock-out and tag-out HVAC system (and other building systems that may create a hazard during the removal activity) in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.

- b) Regulate and isolate the work area with warning signs, barrier tape, and critical barriers in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.
- c) Upon approval of the work site preparation by consultant or delegated authority, contractor may proceed to remove the material using the below listed procedures.
- d) Put down polyethylene drop cloth below removal area to catch any debris generated during removal.
- e) Place tools, equipment and materials needed in work area.
- f) Spray amended water ACM prior to start of removal.
- g) Do not cut, abrade, or break ACM.
- h) Do not allow ACM to drop from elevated heights. Always carry disposal bag to the ground, do not drop.
- i) If material can cut through the disposal bags, place ACM into one 6 mil bag and then into barrels for fiber drums.
- i) Clean up any debris or dust using HEPA vacuuming and wet wiping.
- k) Notify consultant or delegated authority that work is complete so that a visual inspection and any clearance air monitoring can be conducted.
- l) Upon passage of the visual inspection and clearance air monitoring (if conducted), warning signs, barrier tape, and critical barriers may be removed.

6.2.3 Miscellaneous Friable Materials

The following procedures shall be used to remove friable ACM:

- a) Isolate or shut down, lock-out and tag-out HVAC system (and other building systems that may create a hazard during the removal activity) in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.
- b) Regulate and isolate the work area with warning signs, barrier tape, and critical barriers in compliance with all local, state, and federal regulations called out in the Specification/Work Plan.
- c) Set up a negative pressure enclosure around the work area in compliance with all local, state, and federal regulations and as specified in the Specification/Work Plan.
- d) Construct hygiene facilities with an equipment room; shower area; clean change room; lunch areas; decontamination of workers, equipment and containers in compliance with all local, state, and federal regulations and as specified in this Specification/Work Plan.
- e) Upon approval of the work site preparation by consultant or delegated authority, contractor may proceed to remove the material using the below listed procedures.
- f) Place tools, equipment and materials needed into enclosure.
- g) HEPA vacuum the work area.
- h) Thoroughly wet the asbestos-containing material to be removed to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for water to penetrate material thoroughly. Spray material repeatedly with amended water during the work process to maintain a continuously wet condition.
- i) Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels using commercially available "foggers."

- j) Remove saturated asbestos-containing material in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags, bend over and seal with minimum three wraps of duct tape. Clean outside and move to wash down station adjacent to material decontamination unit.
- k) Pick up any debris and place into disposal bags. HEPA vacuum and wet wipe any dust generated.
- 1) Allow the owner or the owner's representative the opportunity to conduct a visual inspection of the work area.
- m) Use nylon brushes and wet rags to clean any residual asbestos-containing material from the area. Lightly mist with a lock-down encapsulant the area where the material was removed and 6inches to 12 inches around the area. This will lock down any fibers which may have settled onto the vicinity adjacent to the work area. The HEPA vacuum should be continuously running during the final cleaning and encapsulating work.
- n) Notify consultant or delegated authority that work is complete so that a visual inspection and any clearance air monitoring can be conducted.
- o) Upon passage of the visual inspection and clearance air monitoring (if conducted), warning signs, barrier tape, mini-containment and critical barriers may be removed.
- p) Attach appropriate asbestos warning labels to the outside of the second layer of wrapping and properly dispose of material as friable ACM waste.

7.0 PROHIBITED ACTIVITIES

The training program for the maintenance and custodial staff should describe methods of handling ACM, as well as routine maintenance activities that are prohibited when ACM is involved.

For example, maintenance staff employees should be instructed:

- a) Not to drill holes in ACM.
- b) Not to hang plants or pictures on structures covered with ACM.
- c) Not to sand ACM including floor tile. Stripping of floor tile finishes shall be conducted using low abrasion pads at speeds lower than 300 rpm with wet methods.
- d) Not to damage ACM while moving furniture or other objects.
- e) Not to install curtains, drapes, or dividers in such a way that they damage ACM.
- f) Not to dust floors, ceilings, moldings or other surfaces in asbestos-contaminated environments with a dry brush or sweep with a dry broom.
- g) Not to use an ordinary vacuum to clean up asbestos-containing debris.
- h) Not to remove ceiling tiles from below ACM without the use of proper respiratory protection, clearing the area of other people, and observing asbestos removal waste disposal procedures.
- i) Not to shake ventilation filters that are contaminated with ACM.
- j) Not to remove contaminated ventilation filters dry.

Appendix E

Training Requirements

TRAINING REQUIREMENTS

Proper employee training is a vital element in worker protection. The work practices described in this plan should be implemented in conjunction with proper worker training. EPA Asbestos Worker Protection Rules [40 CFR Part 763, Subpart G], EPA Asbestos Model Accreditation Plan [40 CFR 763], OSHA Construction Standard [Title 29, CFR 1926.1101], and OSHA General Industry Standard [Title 29, CFR 1910.1001] require various levels of training depending on the work practices involved; and cross-reference each other in specifying training requirements. In general, the requirements outlined in the EPA Asbestos Model Accreditation Plan provide the type, duration, and topics to be covered for various classes of training. The following is a list of pertinent training that asbestos workers or contractors should receive prior to performing work that may disturb ACM.

- **Asbestos Contractor/Supervisor**: Personnel who supervise Class I and II asbestos work must complete 40 hours of asbestos contractor/supervisor training. An eight hour refresher course is required annually for certification to be maintained.
- Asbestos Abatement Worker: Thirty-two hours of training must be completed by personnel
 who perform Class I, and in some circumstances, Class II asbestos work. Class I and II
 asbestos work includes removal or encapsulation of ACM where the sole intent of a project
 being performed is to abate asbestos. An eight hour refresher course is required annually to
 maintain certification.
- Operations and Maintenance: Sixteen hours of training shall be completed by personnel who perform Class III asbestos work. Annual refresher training is required, but no minimum number of hours is specified. The "competent person" determines the level of training required for personnel performing O&M work. A competent person is defined by OSHA as "one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor, or its equivalent and, for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92 (a)(2)."
- **General Awareness**: Two hours of training must be completed by personnel who perform Class IV asbestos work and maintenance and custodial staff who work in buildings containing ACM. Annual refresher training is required, but no minimum number of hours is specified.

The amount and content of worker training must meet OSHA and EPA minimum requirements. General subject areas that all O&M training should include: personal protective equipment and respirator training where applicable; health risks associated with asbestos exposures; and the importance of carefully adhering to building O&M programs.

The 16-hour Operations & Maintenance training should emphasize hands-on removal, maintenance, and repair methods. The workers should learn how to use the O&M plan and how to perform specific tasks including glovebag removal methods and constructing negative pressure mini-enclosures.

Appendix F PPE Requirements

PERSONAL PROTECTIVE EQUIPMENT

PROTECTIVE CLOTHING

- 1. GSA shall provide or require the use of protective clothing, such as coveralls or similar whole-body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos that exceed the permissible exposure limit (PEL) and/or excursion limit prescribed in 29 CFR 1926.1101. The above statement also applies to all employees for whom a required negative exposure assessment has not been produced, and for any employee performing Class I operations which involve the removal of > 25 linear or 10 square feet of TSI or surfacing ACM or PACM.
- 2. GSA shall prohibit the removal of asbestos from protective clothing and equipment by blowing, shaking, or brushing.
- 3. Laundering.
 - a) The employer shall ensure the laundering of contaminated clothing so as to prevent release of airborne asbestos in excess of the PEL or excursion limit prescribed in 29 CFR 1926.1101.
 - b) Any employer who gives contaminated clothing to another person for laundering shall inform such person of the contamination to avoid the release of airborne asbestos in excess of the PEL and excursion limit prescribed in 29 CFR 1926.1101.
 - c) Contaminated clothing shall be transported in sealed impermeable bags, or other closed, impermeable containers, and be labeled in accordance with 29 CFR 1926.1101.
- 4. Inspection of protective clothing.
 - a) The competent person shall examine worksuits worn by employees at least once per workshift for rips or tears that may occur during performance of work.
 - b) When rips or tears are detected while an employee is working, rips and tears shall be immediately mended, or the worksuit shall be immediately replaced.

RESPIRATORY PROTECTION

Respiratory protection is required under OSHA 1926.1101 any time:

- 1. Class I asbestos work is undertaken
- 2. Class II asbestos work is undertaken where the ACM is not removed in a substantially intact state.
- 3. Class II and III asbestos work which is not performed using wet methods. An example of this would be working around live electrical outlets.
- 4. Class II and III asbestos work for which a "negative exposure assessment" hasn't been conducted.

- 5. Class III asbestos work when TSI or surfacing ACM or PACM is being disturbed.
- Class IV asbestos work performed in regulated areas where employees performing asbestos work are required to use respirators.

If respiratory protection is required, the GSA must implement a respiratory protection program in accordance OSHA Construction Standard [29 CFR 1926.1101] and Asbestos Worker Protection Rules [40 CFR Part 763, Subpart G].

No employee shall be assigned to asbestos work that requires respirator use if, based on their most recent medical examination, the examining physician determines that the employee will be unable to function normally while using a respirator, or that the safety or health of the employee or other employees will be impaired by the employee's respirator use. Such employees must be assigned to another job or given the opportunity to transfer to a different position that they can perform. For a transfer to occur, it must be with the same employer, in the same geographic area, and with the same seniority, status, rate of pay, and other job benefits the employee had just prior to such transfer.

Respirator Selection

1. The employer shall select the appropriate respirator as specified in the table below.

TABLE 1
RESPIRATORY PROTECTION FOR ASBESTOS FIBERS

AIRBORNE CONCENTRATION OF ASBESTOS OR CONDITION OF USE	REQUIRED RESPIRATOR
Not in excess of 1 f/cc (10 X PEL), or otherwise as required independent of exposure.	Half-mask air purifying respirator other than a disposable respirator, equipped with high-efficiency filters.
Not in excess of 5 f/cc (50 X PEL).	Full facepiece air-purifying respirator equipped with high-efficiency filters.
Not in excess of 100 f/cc (1,000 X PEL).	Any powered air-purifying respirator equipped with high-efficiency filters or any supplied air respirator operated in continuous flow mode.
Not in excess of 100 f/cc (1,000 X PEL).	Full facepiece supplied air respirator operated in pressure-demand mode.
Greater than 100 f/cc (1,000 X PEL) concentration.	Self-contained breathing apparatus (SCBA): Positive Pressure respirator Pressure demand Full facepiece

Note: a. Respirators assigned for high environmental concentrations may be used at lower concentrations, or when required respirator use is independent of concentration.

Note: b. A high-efficiency filter means a filter that is at least 99.97 percent efficient against monodispersed particles of 0.3 micrometers in diameter or larger.

- 2. The employer shall provide a tight-fitting powered air-purifying respirator in lieu of any negative-pressure respirator specified in the table above whenever:

 - An employee chooses to use this type of respirator; and
 This respirator will provide adequate protection to the employee.

Appendix G

Medical Surveillance and Fit-Testing Requirements

MEDICAL EXAMINATIONS AND RESPIRATOR FIT-TESTING

GSA shall ensure that all medical examinations and procedures are performed by a licensed physician, and are provided at no cost to the employee and at a reasonable time and place. Also, for employees who are required to wear a tight-fitting respirator, an annual respirator fit-test must be completed.

MEDICAL EXAMINATIONS

The employer shall make available medical examinations and consultations to each employee covered under 29 CFR 1926.1101 on the following schedules:

- 1. Prior to assignment of the employee to an area where negative- pressure respirators are worn:
- 2. When the employee is assigned to an area where exposure to asbestos may be at or above the permissible exposure limit for 30 or more days per year, or for employees who engage in Class I, II or III work for a combined total of 30 or more days per year. For either situation, a medical examination must be given within 10 working days following the thirtieth day of exposure. A medical examination must be provided at least annually thereafter.
- 3. If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies specified by the physician. GSA shall provide a medical examination at the termination of employment for any employee who has been exposed to airborne concentrations of asbestos at or above the permissible exposure limit and/or excursion limit. The medical examination shall be given within 30 calendar days before or after the date of termination of employment.

RESPIRATOR FIT-TESTING

The employer shall make available to any employee required to use a tight-fitting respirator, a respirator fit-test as outlined by OSHA 29 CFR 1910.134 - Appendix A. The respirator fit-testing procedure includes the following:

- 1. Fit Testing Procedures -- General Requirements
 - a) The test subject shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- 2. Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.

- 3. The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
- 4. The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.
- 5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item 6. If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
- 6. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose;
 - (b) Room for eye protection;
 - (c) Room to talk;
 - (d) Position of mask on face and cheeks.
- 7. The following criteria shall be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed;
 - (b) Adequate strap tension, not overly tightened;
 - (c) Fit across nose bridge;
 - (d) Respirator of proper size to span distance from nose to chin;
 - (e) Tendency of respirator to slip;
 - (f) Self-observation in mirror to evaluate fit and respirator position.
- 8. The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 of this section or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

- 9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.
- 10. If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.
- 11. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.
- 12. Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
- 13. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.

14. Test Exercises.

- (a) Employers must perform the following test exercises for all fit testing methods prescribed:
 - i. Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.
 - ii. Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
 - iii. Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
 - iv. Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).
 - v. Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- vi. Grimace. The test subject shall grimace by smiling or frowning.
- vii. Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.
- viii. Normal breathing. Same as exercise (1).
- (b) Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

Appendix H

Emergency Procedures

EMERGENCY PROCEDURES

If a release or suspected release of asbestos fibers occurs, evacuate the area of concern and call the GSA Safety Office:

David Hartshorn at 816-823-2227 or cell # 816-277-5229 or david.hartshorn@gsa.gov

or

Gary Adams at 816-823-1704 or cell # 816-401-6484 or gary.adams@gsa.gov

Clean up of asbestos spills must be performed by specially trained personnel. Proper procedures must be followed to reduce the spread of asbestos fibers after a release has occurred. Depending on the severity of the release, an asbestos contractor may need to be called to conduct the cleanup operation.

Appendix I

Disposal Requirements

ASBESTOS WASTE HANDLING AND DISPOSAL PROCEDURES

GSA shall ensure that all asbestos waste is handled and disposed of by the most appropriate means and using state-of-the-art methods. The applicable regulations that outline such handling and disposal of asbestos can be found in the following regulations:

Worker Protection Standards, Construction Industry
 Worker Protection Standards, General Industry
 Federal Asbestos Abatement Regulations
 Federal Asbestos Regulations
 Federal Transportation Regulations
 OSHA 29 CFR 1926.1101
 OSHA 29 CFR 1910.1001
 EPA NESHAP 40 CFR 61 Subpart M
 EPA AHERA 40 CFR Part 763
 DOT 49 CFR Parts 171 and 172

Asbestos Waste Handling

- 1. There are three basic principles for the packaging of solid asbestos waste:
 - a) Maintain Thoroughly Saturated
 - b) Must be Completely Sealed
 - c) Properly Labeled with OSHA Danger Signs and Generator Labels
- 2. The three types of packaging for solid asbestos waste are:
 - a) Bags: Six-mil minimum In addition to the requirement for immediate bagging of waste for disposal, it is further recommended that the waste material be double-bagged and sealed in bags specifically designed for asbestos disposal. The bags should be stored in a waste storage area that can be controlled by the workers conducting the removal.
 - b) Drums: Metal, fiberglass, or fiber, plastic-lined with tight fitting lid
 - c) Wrapped: 2 layers of 6-mil plastic
- 3. Liquid asbestos waste should be:
 - a) Mixed with solid waste (preferred)
 - b) Separated into filtered water and solid waste. Filtered water (through a five micron filter) can then be disposed into a sanitary sewer.
- 4. On-Site Storage Requirements:
 - a) Bag Loadout Rooms (during abatement) separated from work area by control curtain
 - b) Locked, labeled barrels for O&M applications
 - c) Outside fully enclosed dumpsters
- 5. Load-Out Principles:
 - a) Remove gross debris from the outside of the waste package in the work area
 - b) Pass it through a control curtain
 - c) Wear proper PPE as a precaution while handling packages outside the work area and at the disposal site.

Waste Disposal

- 1. Vehicle Requirements:
 - a) Plastic lined enclosed vehicle (preferred) or cover load with plastic
 - b) DOT labels on the waste shipping containers
 - c) Clean vehicle when through with disposal
 - d) Vehicle marked with danger sign (NESHAPS) during loading and unloading
 - e) Trained and/or licensed waste hauler or escorts as required by state regulations

2. Landfill Disposal:

- a) Notification and prior permission is normally required. State and local regulation control.
- b) Non-friable ACM that will not be rendered friable during removal may be able to be disposed as normal construction debris in certain areas.
- c) Carefully remove ACM containers from transport vehicle
- d) The landfill is required to cover the ACM within 24 hours with 6 inched of non-asbestos material.
- e) A special area should be set aside in the landfill for asbestos
- f) A disposal manifest is required and must be kept a minimum of two years

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Inspection Protocol

ASBESTOS INSPECTION PROTOCOL

The following outlines the procedures and protocols that were utilized by representatives of OCCU-TEC while conducting asbestos inspections of GSA managed facilities.

GENERAL

- 1. The inspection was conducted by an accredited inspector.
- 2. The inspector:
 - a) Visually inspected the area to identify the locations of suspected asbestos-containing building material (ACBM).
 - b) Touched all suspected ACBM to determine friability.
 - c) Identified all homogeneous materials of suspected friable and nonfriable ACBM.
 - d) Sampled each identified homogeneous material in accordance with 29 CFR 1910.1001 pursuant to the requirements of 40 CFR 763.86, or assumed the material to be an ACBM.
 - e) Assessed each identified homogeneous material in each functional space in accordance with 29 CFR 1910.1001 pursuant to the requirements of 40 CFR 763.88.
 - f) Recorded the following information:
 - i. The date of the inspection, the name and signature of the person(s) performing the inspection, and the inspector accreditation number.
 - ii. An inventory of the locations of the homogeneous materials where samples are collected, exact location where each bulk sample was collected, dates that samples were collected, and homogeneous materials where suspected ACBM is assumed to be asbestos-containing material (ACM).
 - iii. A description of the manner used to determine sampling locations, the name and signature of each inspector who collected the samples, and accreditation number.
 - iv. A list of homogeneous materials identified as surfacing material, thermal system insulation, or miscellaneous material.
 - v. Assessments made of material, the name and signature of each inspector who made the assessments and accreditation number.

SAMPLING OF SUSPECT MATERIAL

- 1. Surfacing Material.
 - a) The inspector collected samples in a discrete and random manner that is representative of the homogeneous material.
 - b) As per AHERA 40 CFR 763.86, bulk samples were collected from each homogeneous material following protocol for surfacing materials (3-5-7 rule).
- 2. Thermal System Insulation.
 - a) When possible, samples were collected from damaged areas of the thermal system insulation. If damaged areas were not available, the material was sampled in areas that would be subjected to the least amount of disturbance.
 - b) At least three bulk samples were collected from each homogeneous material of thermal system insulation not assumed to be ACM.
 - c) One bulk sample was collected from each homogeneous material of patched (less than six linear or square feet) thermal system insulation not assumed to be ACM.
 - d) A minimum of one sample or a sufficient number to determine the presence of asbestos was collected from pipe fittings.
 - e) Homogeneous areas the inspector determined to be fiberglass, foam glass, rubber, or other non-ACBM were not sampled.
- 3. Miscellaneous Materials.
 - a) A minimum of one bulk sample was collected from each homogeneous area.

ASSESSMENT OF SUSPECT MATERIALS

- 1. The inspector recorded a written assessment of all known or assumed ACBM in the property.
- 2. The name, signature, and accreditation number is included in the report.
- 3. The assessment included the following considerations:
 - a) Location and the amount of material, both in total quantity and as a percentage of the functional space.
 - b) Condition of the material, specifying:

- i. Type of damage or significant damage (e.g. contact, vibration, and/or air erosion).
- ii. Severity of damage (e.g. major flaking, severely torn jackets, as opposed to occasional flaking, minor tears to jackets).
- iii. Extent of spread of damage over large areas or large percentages of the homogeneous area.
- c) Whether the material is accessible.
- d) The material's potential for disturbance.

SAMPLING METHODOLOGY

OCCU-TEC identified and sampled suspect ACBM, using state-of-the-art sampling protocols in accordance with all applicable local, state, and federal regulations. The suspect ACBMs were separated into homogenous materials, and sampled accordingly.

BULK SAMPLE ANALYSIS

The bulk samples were submitted to a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory, via delivery service, for analysis. The National Institute of Standards and Technology (NIST) accredits labs under NVLAP. Each bulk sample was analyzed by polarized light microscopy (PLM) using the dispersion staining technique, as set forth in 40 CFR 763, Subpart E, Appendix E, *Interim Method for the Determination of Asbestos in Bulk Insulation Samples*.

A material is considered to be an ACM if at least one sample collected from the homogenous material showed asbestos present in an amount greater than one percent (1%), which is in accordance with the definition of ACM as per AHERA.

Appendix K Lab Result Reports



September 29, 2010

Jeff Smith OCCU-TEC INC. 6501 E. Commerce Suite 230 Kansas City, MO 64120-

Bureau Veritas Work Order No. A1009252

Reference: WORD PARKWAY FEDERAL BUILDING (M00134)

Dear Jeff Smith:

Bureau Veritas North America, Inc. received 29 samples on 9/27/2010 10:07:37 AM and reported on 9/29/2010 2:11:42 PM for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a thirty-day holding period, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.



Alan M. Segrave, P.G. Director, Laboratory Services



CASE NARRATIVE

CLIENT: OCCU-TEC INC.

Project: WORD PARKWAY FEDERAL BUILDING (M00134)

Work Order No A1009252 Report Date: 29-Sep-10

ANALYTICAL METHOD FOR ASBESTOS IN BULK SAMPLES USING POLARIZED LIGHT MICROSCOPY (PLM)

Use of EPA/600/R-93/116 satisfies applicable requirements of the USEPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Sample", EPA-600/M4-82-020, December 1982, published as Appendix E to Subpart E of 40CFR763. Bulk samples analyzed by New York State methods follow stratified point counting methods (198.1) or Method 198.6 for PLM non-friable organically bound materials (NYSDOH Lab Code –11645). Percentages are visual estimations of asbestos >10:1 aspect ratio. The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed. NESHAP requires point counting of a bulk sample when the result is <10% by a method other than point counting. EPA, however states that if 3 mounts of the sample are analyzed and the asbestos percentage is <10% by visual estimation, the client may elect to assume the amount to be greater than 1% or require verification by point counting. If the result by point counting is different than the result obtained by visual estimation, the point count result will be used. Sample friability or non-friability noted on the report is a requirement for the State of California and refers only to the condition of the sample under macroscopic examination. It does not imply friability or non-friability for the sample as collected or observed in the field as determined by the person collecting the sample. The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

(a)Polarized- light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing. When analysis of such materials by PLM yields results negative for the presence of asbestos, Bureau Veritas recommends utilizing quantitative transmission electron microscopy (TEM). For more information, contact the laboratory.

References

McCrone, Walter C. 1980. The Asbestos Particle Atlas. Ann Arbor, MI: Ann Arbor Science Publishers, Inc.

United States Environmental Protection Agency. Environmental Monitoring Systems Laboratory. 1982. Interim Method for the Determination of Asbestos in Bulk Insulation Samples. EPA-600/M4-82-020. Washington: GPO, December.

United States Environmental Protection Agency. Method for the Determination of Asbestos in Bulk



CLIENT: OCCU-TEC INC.

Project: WORD PARKWAY FEDERAL BUILDING (M00134)

Work Order No A1009252 Report Date: 29-Sep-10

Building Materials. EPA-600/R-93/116, July 1993 (PLM)

Fed. Reg. Vol. 55, No.224, 11/20/90, p.48415 (NESHAP) EPA Memorandum 5/8/1991 –NESHAP Clarifications

NYSDOH Methods 198.1/198.6



ANALYTICAL RESULTS

CLIENT: OCCU-TEC INC. Sample Type: Bulk

Work Order No.: A1009252 **Date Received:** 9/27/2010

Client Reference: WORD PARKWAY FEDERAL BUILDING (M00134) Report Date: 29-Sep-10

Method Reference: EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1

Lab II)		Client Sample ID		Analyst	Date Sample	i	Date Analyzed
<u>001A</u>	DW/	DC-01	1-01		TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	50	Homogeneous White Joint Compound	None Detected		Non-Detected		Binder/Filler
	(2)	50	Homogeneous Off-White Drywall	None Detected		Cellulose fiber	10%	Binder/Filler
002A	DW/	DC-01	1-02		TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Drywall	None Detected		Cellulose fiber	10%	Binder/Filler
						Fibrous glass	10%	
003A	PL-0	2-01			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1) 100 Ho		Homogeneous White Plaster	None Detected		Non-Detected		Binder/Filler
004A	PL-0	2-02			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	60	Homogeneous White Plaster	None Detected		Fibrous glass	20%	Binder/Filler
	(2)	40	Homogeneous Tan Mastic	None Detected		Non-Detected		Binder/Filler
005A	BBA	-04-0	1		TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	90	Homogeneous Tan Baseboard	None Detected		Non-Detected		Binder/Filler
	(2)	10	Homogeneous Yellow Mastic	None Detected		Non-Detected		Binder/Filler
006A	CT-0	5-01			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

9/29/2010





ANALYTICAL RESULTS

CLIENT: OCCU-TEC INC. Sample Type: Bulk

Work Order No.: A1009252 Date Received: 9/27/2010

Client Reference: WORD PARKWAY FEDERAL BUILDING (M00134) Report Date: 29-Sep-10

Method Reference: EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1

Lab II)		Client Sample II)		Analyst	Date Sampled	l	Date Analyzed
<u>007A</u>	CT-0	5-02				TD	09/14/2010		09/29/2010
	Layer	POB	Sam	ple Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)) 97 Homogeneous White Ceiling Tile		None Detected	l	Cellulose fiber Mineral wool	35% 35%	Binder/Filler Paint Perlite	
	(2)	3	Homogeneous	Black Plastic	None Detected		Non-Detected		Binder/Filler
008 <u>A</u>	08A BBA-06-01		1			TD	09/14/2010		09/29/2010
	Layer	POB	Sam	ple Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	95	Homogeneous	Blue Baseboard	None Detected		Non-Detected		Binder/Filler
	(2)	3	Homogeneous	Tan Mastic	None Detected		Non-Detected		Binder/Filler
	(3)	(3) 2 Homogeneous White Mineral Mixture		None Detected		Non-Detected		Binder/Filler	
<u>009A</u>	BBA	-07-0	1			TD	09/14/2010		09/29/2010
	Layer	POB	Sam	ple Morphology	Asbestos	%	Other Fibers		Particulate
	(1)	70	Homogeneous	Black Baseboard	None Detected		Non-Detected		Binder/Filler
	(2)	28	Homogeneous	Tan Mastic	None Detected		Non-Detected		Binder/Filler
	(3)	2	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler
<u>010A</u>	LN-0	8-01				TD	09/14/2010		09/29/2010
	Layer	POB	Sam	ple Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	98	Homogeneous	Gray Linoleum	None Detected		Synthetic fiber	20%	Binder/Filler
	(2)	2	Homogeneous	Yellow Mastic	None Detected		Non-Detected		Binder/Filler
<u>011A</u>	CT-0	9-01				TD	09/14/2010		09/29/2010
	Layer	POB	Sam	ple Morphology	Asbestos	%	Other Fibers	%	Particulate
•	(1)	100	Homogeneous	White Ceiling Tile	None Detected		Cellulose fiber Mineral wool	35% 35%	Binder/Filler Paint Perlite

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

9/29/2010



ANALYTICAL RESULTS

CLIENT: OCCU-TEC INC. Sample Type: Bulk

Work Order No.: A1009252 Date Received: 9/27/2010

Client Reference: WORD PARKWAY FEDERAL BUILDING (M00134) Report Date: 29-Sep-10

Method Reference: EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1

Lab II)		Client Sample ID		Analyst	Date Sampled	1	Date Analyzed
012A	CT-0	9-02			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite
<u>013A</u>	CT-0	9-03				09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite
<u>014A</u>	CT-09-04				TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite
<u>015A</u>	CT-0	9-05			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite
<u>016A</u>	CT-0	9-06			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber	35%	Binder/Filler
						Mineral wool	35%	Paint
								Perlite

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.





ANALYTICAL RESULTS

CLIENT: OCCU-TEC INC. Sample Type: Bulk

Work Order No.: A1009252 Date Received: 9/27/2010

Client Reference: WORD PARKWAY FEDERAL BUILDING (M00134) Report Date: 29-Sep-10

Method Reference: EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1

Lab II)		Client Sample ID		Analyst	Date Sampled	ı	Date Analyzed
<u>017A</u>	CT-0	9-07	7		TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous White Ceiling Tile	None Detected		Cellulose fiber Mineral wool	35% 35%	Binder/Filler Paint
<u>018A</u>	LN-1	0-01			TD	09/14/2010		Perlite 09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1) (2)	60 40	Homogeneous Gray Linoleum Homogeneous Yellow Mastic	None Detected None Detected		Synthetic fiber Non-Detected	20%	Binder/Filler Binder/Filler
<u>019A</u>	LN-11-01				TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	70	Homogeneous Brown Linoleum	None Detected		Synthetic fiber	20%	Binder/Filler
	(2)	30	Homogeneous Yellow Mastic	None Detected		Non-Detected		Binder/Filler
<u>020A</u>	LN-1	2-01			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous Gray Linoleum	None Detected		Synthetic fiber	20%	Binder/Filler
021A	LN-1	3-01			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	98	Homogeneous Gray Linoleum	None Detected		Non-Detected		Binder/Filler
	(2)	2	Homogeneous White Mastic	None Detected		Non-Detected		Binder/Filler
<u>022A</u>	FS-1	4-01			TD	09/14/2010		09/29/2010
	Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
	(1)	100	Homogeneous Red Fire Stop	None Detected		Fibrous glass	10%	Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

e: (b) (6) ______9/29/2010



ANALYTICAL RESULTS

CLIENT: OCCU-TEC INC. Sample Type: Bulk

Work Order No.: A1009252 Date Received: 9/27/2010

Client Reference: WORD PARKWAY FEDERAL BUILDING (M00134) Report Date: 29-Sep-10

Method Reference: EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1

Layer POB Sample Morphology Asbestos % Other Fibers % Partice	Lab II)	_	Client Sample ID		Analyst	Date Sampled		Date Analyzed
(1) 100 Homogeneous White Sink Undercoating None Detected Non-Detected Binder	023 <u>A</u>	SK-1	5-01			TD	09/14/2010		09/29/2010
Description TD 09/14/2010 09/29/20 1		Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
Layer POB Sample Morphology Asbestos % Other Fibers % Partico		(1)	100	Homogeneous White Sink Undercoating	None Detected		Non-Detected		Binder/Filler
(1) 100 Homogeneous White Sink Undercoating None Detected Non-Detected Binder	024 <u>A</u>	SK-1	6-01			TD	09/14/2010		09/29/2010
Layer POB Sample Morphology Asbestos Other Fibers Ogo/14/2010 Ogo/29/20		Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
Layer POB Sample Morphology Asbestos % Other Fibers % Partico		(1)	100	Homogeneous White Sink Undercoating	None Detected		Non-Detected		Binder/Filler
(1) 100 Homogeneous Black Roofing Tar None Detected Cellulose fiber 20% Binder Ta TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 100 Homogeneous Black Asphalt None Detected Fibrous glass 10% Binder Ta D27A ST-21-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 50 Homogeneous Gray Stair Tread None Detected Non-Detected Binder (2) 50 Homogeneous Tan Mastic None Detected Non-Detected Binder (3) ST-22-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 98 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (2) 2 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (2) 2 Homogeneous Brown Mastic None Detected Non-Detected Binder (2) 2 Homogeneous Brown Mastic None Detected Non-Detected Binder (2) 2 Homogeneous Brown Mastic None Detected Non-Detected Binder (2) 2 Homogeneous Brown Mastic None Detected Non-Detected Binder (3) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (1) 99/14/2010 99/29/20)25 <u>A</u>	<u>5A</u> RT-18-01				TD	09/14/2010		09/29/2010
Ta 226A AS-20-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 100 Homogeneous Black Asphalt None Detected Fibrous glass 10% Binder Ta 227A ST-21-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 50 Homogeneous Gray Stair Tread None Detected Non-Detected Binder (2) 50 Homogeneous Tan Mastic None Detected Non-Detected Binder ST-22-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (1) 98 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (2) 2 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (3) 98 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (4) 98 Homogeneous Brown Mastic None Detected Non-Detected Binder (5) 299A FTM-23-01 TD 09/14/2010 09/29/20 Layer POB Sample Morphology Asbestos % Other Fibers % Partice (6) 10 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (7) 10 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder		Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
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(1) 50 Homogeneous Gray Stair Tread (2) 50 Homogeneous Tan Mastic None Detected Non-Detected Binder (2) 50 Homogeneous Tan Mastic None Detected Non-Detected Binder (3) 50 Homogeneous Tan Mastic None Detected Non-Detected Binder (4) 98 Homogeneous Tan Stair Tread None Detected Non-Detected Binder (5) 2 Homogeneous Brown Mastic None Detected Non-Detected Binder (6) 29A FTM-23-01 TD 09/14/2010 09/29/20 Detected Non-Detected Binder (7) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (8) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 99 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected Non-Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected None Detected None Detected None Detected Binder (9) 90 Homogeneous Tan Floor Tile None Detected None Detected None Detected None Detected	<u> 27A</u>	ST-2	1-01			TD	09/14/2010		09/29/2010
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ST-22-01 TD 09/14/2010 09/29/20		(1)	50	Homogeneous Gray Stair Tread	None Detected		Non-Detected		Binder/Filler
LayerPOBSample MorphologyAsbestos%Other Fibers%Particular(1)98Homogeneous Tan Stair TreadNone DetectedNon-DetectedBinder(2)2Homogeneous Brown MasticNone DetectedNon-DetectedBinder29AFTM-23-01TD09/14/201009/29/20LayerPOBSample MorphologyAsbestos%Other Fibers%Particular(1)99Homogeneous Tan Floor TileNone DetectedNon-DetectedBinder		(2)	50	Homogeneous Tan Mastic	None Detected		Non-Detected		Binder/Filler
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		Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(2) 1 Homogeneous Yellow Mastic None Detected Non-Detected Binder		(1)	99	Homogeneous Tan Floor Tile	None Detected		Non-Detected		Binder/Filler
		(2)	1	Homogeneous Yellow Mastic	None Detected		Non-Detected		Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.





Range R Limit Quartile Limit					
Laboratory					
	Range	R Limit	Quartile Limit		
	0.1-1	100	+/- 1.482		
	10-100	100	+/- 22.23		
	1-10	100	+/- 7.41		
	Trace	100	+/- 1.482		
Tiffany Dixon	(TD)				
	Range	R Limit	Quartile Limit		
	0.1-1	100	+/- 1.482		
	10-100	100	+/- 26.676		
	1-10	100	+/- 5.928		
	Trace	100	+/- 1.482		

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.



A1009252

REQUEST FOR LABORATORY ANALYTICAL SERVICES

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Detroit Lab 22345 Roethel Drive Novi, ML 48375 (800) 806-5887 (248) 344-1770 Fax (248) 344-2655

Atlanta Lab 3380 Chastain Meadows Pky, Ste 300 95 Oakwood Rhad Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 Fax:(770) 499-7511

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REQUEST FOR LABORATORY ANALYTICAL SERVICES

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Bureau Veritas North America, Inc.

Fax(770) 499-7511

Detroit Lab 22345 Roethel Drive Novi, MI 48375 (800) 806-5887 (248) 344-1770 Fax (248) 344-2655

Atlanta Lab 3380 Chastain Meadows Pky, Ste 300 - 95 Cakwood Rood Kemiesaw, GA 30144 (800) 252-9919 (770) 499-7500

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15mith @ occutec.com

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REQUEST FOR LABORATORY ANALYTICAL SERVICES

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Atlanta Lab 3380 Chastain Meadows Pky, Ste 300, 95 Oakwood Road Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 Fax (770) 499-7511

Lake Zurich, H. 60047 (888) 576-7522 (9)(7) 726-332(1 Eax (847) 726-3323

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Jsmith @ occutec.com Call for Credit Card Information Client Job. No. 9003 1 DPO# Hartshorn Dept. Company Company 4151 N Mulberry Drive, Mailing Address 1500 E Bannister Rond Address City, State, Zip Kansas City -5641 (Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added. Word Parkway Federal Building (MD0134) Drinking Water ☐ Groundwater Wastewater Explanation of Preservation FOR LAB AIR VOLUME MATRIX/ TISE ONLY CLIENT SAMPLE IDENTIFICATION (specify units) SAMPLED SAMPLED MEDIA -RT-18-01 RoofTor -AS-20-01 Star- Treat -ST-21-01 Star- Treat 9-14-10 FTM-23-01 Floo-Tile (print) Collector's Signature: Joshua Ashley Collected by: Date/Time CHAIN Date/Time 9-23-10 Received by Date/"inte Date/Time Received by: CUSTODY Date/fime Received at (explain) Sample Con-Date 9-23-16 Authorized by:

LABORATORY COPY

Appendix L

Inspector and Management Planner Accreditation Documentation



CERTIFICATION

NUMBER: 7011060310MOIR12619

THIS CERTIFIES

Joshua K. Ashley

HAS COMPLETED THE CERTIFICATION REQUIREMENTS FOR

Inspector

APPROVED: 6/16/2010

. .

XPIRES: 6/16/2011

TRAINING DATE: 6/3/2010

Orector of Air Pollution Control Program





Appendix M

Glossary of Terms and Definitions

Glossary of Terms

Unless otherwise noted with an asterisk (*), the following definitions contained in this Glossary can be found under 40 CFR § 763.83:

Act means the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601, et seq.

Accessible when referring to asbestos-containing material (ACM) means that the material is subject to disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.

Accredited or accreditation when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Act.

Air erosion means the passage of air over friable asbestos-containing building material (ACBM) which may result in the release of asbestos fibers.

Asbestos means the asbestiform varieties of: Chrysotile (serpentine); crocidolite (riebeckite); amosite; anthophyllite; tremolite; and actinolite.

Asbestos-containing material (ACM) when referring to school buildings means any material or product which contains more than 1 percent asbestos.

Asbestos-containing building material (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

Asbestos debris means pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

Damaged friable miscellaneous ACM means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged friable surfacing ACM means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated

water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged or significantly damaged thermal system insulation ACM means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

Designated Person means a person appointed by the Local Education Agency (LEA), under 40 CFR §763.84 (g), who is trained to ensure the proper implementation of AHERA in school buildings. *

Encapsulation means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

Enclosure means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.

Fiber release episode means any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

Friable when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

Functional space means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

High-efficiency particulate air (HEPA) refers to a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 :m in diameter or larger.

Homogeneous area means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

Local education agency (LEA) means: (1) Any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381). (2) The owner of any nonpublic, nonprofit elementary, or secondary school building. (3) The governing authority

of any school operated under the defense dependent's education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).

Miscellaneous ACM means miscellaneous material that is ACM in a school building.

Miscellaneous material means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

Nonfriable means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

Operations and maintenance program (O&M) means a program of work practices to maintain friable ACBM in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.

Phase contrast microscopy (PCM) refers to the procedure outlined in NIOSH Method 7400 for the evaluation of fibers in air samples.*

Polarized light microscopy (**PLM**) refers to the method outlined in 40 CFR § 763, Appendix E to Subpart E, for the identification of asbestos in bulk samples.*

Potential damage means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

Potential significant damage means circumstances in which: (1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities. (2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage. (3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

Preventive measures means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

Removal means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.

Repair means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

Response action means a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACBM.

Routine maintenance area means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

School means any elementary or secondary school as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).

School building means: (1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food. (2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education. (3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs. (4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building" under paragraphs (1), (2), or (3). (5) Any portico or covered exterior hallway or walkway. (6) Any exterior portion of a mechanical system used to condition interior space.

Significantly damaged friable miscellaneous ACM means damaged friable miscellaneous ACM where the damage is extensive and severe.

Significantly damaged friable surfacing ACM means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

State means a State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.

Surfacing ACM means surfacing material that is ACM.

Surfacing material means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal system insulation (TSI) means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal system insulation ACM means thermal system insulation that is ACM.

Transmission electron microscopy (TEM) refers to the method outlined in 40 CFR § 763, Appendix A to Subpart E, for the identification of asbestos in air samples.*

Vibration means asbestos fibers.	the	periodic	motion	of	friable	ACBM	which	may	result	in	the	release	of

Common Acronyms

ACM - Asbestos-containing material

ACBM - Asbestos-containing building material

AHERA - Asbestos Hazard Emergency Response Act

DOT - Department of Transportation

DP - AHERA Designated Person

EPA - U.S. Environmental Protection Agency

HEPA - High-efficiency particulate air

LEA - Local Education Agency

NIOSH - National Institute for Occupational Safety and Health

NIST - National Institute of Standards and Technology

NVLAP - National Voluntary Laboratory Accreditation Program

O&M - Operations and maintenance

OSHA - Occupational Safety and Health Administration

PCM - Phase contrast microscopy

PLM - Polarized light microscopy

TEM - Transmission electron microscopy

TSI - Thermal system insulation



STEWART INDUSTRIAL HYGIENE AND SAFETY, INC.

RED BRIDGE PROFESSIONAL PUR DING 400 EAST HED BRIDGE BEACH KANSAS CITY, MO 64351 PHONE B16-940-0507

Client GSA
Location 89 Ward Parkway
Bldg. No Date 6-4-86 Surveyor MDD/CJQ
Sample No. MFB#6 Semple Location Mechanical rm boiler area
Condition of piping, etc. good condition
Estimated pipe size 12" Length throughout Duct n/a
Comments: pipe sealed with tape
Results: UBTL: none detected
Blog. No Date 6-4-86 SurveyorMDD/CJQ
Sample No. MFB#7 Sample Location Hallway south entrance
Condition of pipe, etc. n/a
Estimated pipe size n/a Length n/a Duct n/a
Comments: asbestos tíle
Results: UBTL: 2-3% chrysotile
Date Sent to Lab 6-13-86 Date Lab Reported Results 7-8-86



STEWART INDUSTRIAL HYGIENE AND SAFETY, INC.

HED BRIDGE PROFESSIONAL BUILDING 400 EAST HED BRIDGE ROAD KANSAS CITY, MO 64154 PHONE 816-947-0557

Client GSA		
Location 89 Ward Parkway		
Bldg. No Date6-4-	86 Surveyor MDD/CJQ	
Sample No. FB-1	Sample Location	
Condition of piping, etc. Good		
Estimated pipe size4"		
Comments: elbows		
Results: UBTL: 2 1-2% amosite		
Bläg. NoDate	Surveyor	
Sample No.	Sample Location	
Condition of pipe, etc.		
Estimated pipe size	Length	
Comments:		
Results: UBTL:		
Date Sent to Lab 6-13-86	Date Lab Reported Resu	lts 7-8-86

S

STEWART INDUSTRIAL HYGIENE AND SAFETY, INC.

HED BRIDGE PROFESSIONAL BUILDING 400 EAST RED BRIDGE ROAD KANSAS CITY, MO 64154 PHONE 816-940-0507

Client GSA
Location 89 Ward Parkway
Bldg. No. FB Date 6-4-86 Surveyor MDD/ C.10
Sample No. MFB #5 Sample Location Honeywell 680 Rm.
Condition of piping, etc. n/e
Estimated pipe size n/a Length n/a Duct n/a
Comments: Water main was sealed with tape.
Results: UBTL: Elbow T's half inch pipe- present <1% amosite
Blag. No. FB Date 6-4-86 Surveyor MDD/CIQ
Sample No. MFB #2 Sample Location Computer Em.
Condition of pipe, etc. n/a
Estimated pipe size None Present Length n/a Duct n/a
Comments: Sample taken from wall.
Results: UBTL: none detected
Date Sent to Lab 6-13-86 Date Lab Reported Results 7-8-86

General Services Administration Federal Building Kansas City, Missouri

DISCUSSION

June 4th, 1986

Mike Duffey and I arrived at the Federal Bldg. at 0800. The Bldg. size was estimated at approximately 197,644 square feet. We were escorted through the Bldg. by Mr. Lonny Griffin.

We surveyed the coolant unit on the roof of the Bldg. No asbestos was prevalent. The pipes were all securely sealed. A sample was taken from the west tank.

The mechanical room area had 12" inch pipes throughout the Bldg. All the pipes were encapsulated and the pipes were in good condition. The mechanical room boiler room piping was also in good condition.

The tile in the hallway in the south entrance did contain asbestos in the tile. We gathered a sample of the tile in our asbestos assessment.

The machine room had piping estimated approximately 4" inches throughout the room. The northeast machine room was in good condition. It had been remodeled within the past year. A total of eight (8) samples were taken.

Prepared by Carmen Quintero Reviewed by Albert E. Stewart



Form ARF-A

Page 1 of 1 Part 1 of 1

ANALYTICAL REPORT FORM

Date 425 84
Agency Identification Number G2069

Stewart Industrial Hygiene & Safety 400 East Red Bridge Road, Suite 318 Kansas City, MO 64131 Rec 7/4/46

Telephone (816) 942-6587

sampling C	Collection a Sampling S Date Sampl	Site <u>F</u> e	deral B	_			Collec	tion Ju	ne 06,	1986	
Analysis	Method of Date(s) of	Analy:	sis	F	olary 6/2	rd Lig 1/86	at Mic	rescop	/		_
Analytical Field Sample Finner	Results UBTL Lab Kumber	dample Type	Chrysotile ASBESTOS (70)	Amosite Assessos]
FS #1	CG 12151	BULK	MD	21-27	<u> </u>	 	1				ĺ
MFB #2	CG 12152	BULK	ND	,VD							Г
MF9 #3	CG 12153	BULK	ND	ND							Γ
MFB #4	CG 12154	BULK	ND	ND							Γ
MFB #5	CG 12155	BULK	ND	41%							Γ
MFB #6	CG 12156	BULK	ND	ND							Γ
MFG #7	CG 12157	BULK	2-38	ND							Γ
Limit of De	tection				17.1711						Γ
Limit of Qu	antitation										
										•	-
ND Paramete	ment on lest er not detect er below LOD er to be anal	. od.		Paramete	r between	nelyzed (ment on	lest pag	i•)-	

S

STEWART INDUSTRIAL HYGIENE AND SAFETY, INC.

RED BRIDGE FROFFSSIONAL FUE DING 400 EAST RED BRIDGE ROAD KANSAS DITY, MD 64151 PHONE B16-940-0507

Client GSA	
Location 89 Ward Parkway	
Bldg. No. 122 Date 6-4-86	Surveyor MDD/CJQ
Sample No. MFB 123 #3 Samp	le Location Boiler room
Condition of piping, etc. sealed well	res and the second supportations with the second of the second se
Estimated pipe sizen/a	Length n/a Duct n/a
Comments: n/a	
Results: UBTL: none detected	
Blog. No Date6-4-86 _ \$	Surveyor MDD/CJQ
Sample No. MFB 122 #4 Samp	
Condition of pipe, etc. sealed well	
Estimated pipe sizen/a	
Comments:	
Results: UBTL: none detected	
Data Sant to Tab 6-13-86 D	ate Lah Reported Results 7-8-86

ANALYTICAL REPORT

ANALYSIS OF BULK SAMPLES FOR ASBESTOS

All samples were examined for homogeneity. Non-homogeneous samples were ground to insure homogeneity.

Microscope slides were prepared from each sample using 1.55 refractive index liquid. The slides were then examined for the presence of asbestos utilizing polarized light microscopy and dispersion staining techniques. A phase contrast microscope equipped with a 16x objective and a 10x eyepiece was used for the analysis.

The percentage of asbestos was estimated microscopically by a visual examination of the fibers with an aspect ratio of 3:1 or greater. If present, asbestos identities were confirmed with the appropriate refractive index liquids applying dispersion staining techniques.

The results are tabulated on the following page(s).

Rand Potter



UBTL, INC. 520 WAKARA WAY SALT LAKE CITY, UTAH 84102 801 / 583-3600

PIPE AND BOILER INSULATION (ACM)

ASSESSMENT FORM
Building Name and Address: Fed Bldy 8930 (Ined Poelway Kello
Location in Building: Room No. Thought
Date of Assessment: 6/4/86
Building Asbestos Record: Yes X No
Type of Pipe and Boiler Insulation (ACM):
Pipe Insulation: Water Pipe X Steam Pipe X
Duct Insulation: Duct Wrapping Transite Board
Boiler Lagging:
Tank Insulation:
Elbow Joints: X
Area Around: Valves X Flanges X Other
Asbestos Content: /-2 %
Laboratory Analysis X, Building Record
Assumption (when material is in good condition)
Type of Asbestos Fibers: chaysofile, amosite
Size of Damaged ACM: Linear Ft. Square Ft.

Location Specifics:	Mechanical Room: Air Handler Room
·	Boiler Room
	Other
	Above Suspended Ceiling: Air Plenum
	Enclosed Space
	From Floor to Ceiling
•	Stairwell
	Garage
	Peripheral HVAC
Is the Insulation Wra	apping Pink or Yellow? Yes No
Current Condition of	ACM:
Physical Damage/De	eterioration: Major Minor X
	None
Water Damage/Deter	rioration: Major Minor λ None
Friability of Dama	aged Area: High Low X
Potential for Future	Damage, Disturbance, or Erosion:
Accessibility: H	.gh Low _X
Activity and Mover	ment: High Low X
Activity and Mover	ment: HighLowX_
Vibration: High	Low X
In Direct Air Stre	eam or Plenum: Yes No _X_
No. of Occupants Affe	ected: (Maintenance or Office Workers) $3-5$

Special O/M Program:
Visual Inspection: Semiannual More Frequent
Air Monitoring Requirement: Yes No No No No
Cleaning (initial and semiannual): Wet Mopping
Steam Clean HEPA-Vacuuming X
Maintenance: Containment Barrier Worker Protection X
Facility Asbestos Control Manager Authorization
Complete Assessment for Large Scale Project
Abatement Actions:
Removal and Replacement Encapsulation
Enclosure
Removal/Replacement As Soon As Possible (for ACM in poor condition and with low or high potential of future damage, disturbance or erosion)
Selective or Complete Removal As Soon As Possible (for ACM with minor damage or deterioration and with low or high potential of future damage, disturbance or erosion)
Removal, Encapsulation or Enclosure Integrated With Planned Repair and Alteration (for ACM in good condition but with high potential of future damage, disturbance, or erosion)
No Further Action Now Beyond Special O/M Program (for ACM in good condition and with low potential of future damage, disturbance, or erosion)
ASSESSOR:(Signature)
M.E. Grassley (Printed or Typed Name) TITLE/FIRM: GSA
TITLE/FIRM: 65A TELEPHONE: 926-5318





December 15, 1992

Health Unit 40 P.O. Box 25145 Denver Federal Center Denver, CO 80225-0145

Pat Scott USPHS/FOH/Region VII 1150 Grand Avenue, Suite 800 Kansas City, MO 64106

Dear Ms. Scott:

Attached are the results of the bulk sample materials from 8930 Ward Parkway, Kansas City, MO, submitted to the Division of Federal Employee Occupational Health (DFEOH) National Environmental Reference Laboratory in Denver, Colorado for asbestos identification. These samples were received at our facility on November 22, 1992. The methods used for this evaluation involved stereo and polarized light microscopy (PLM), supplemented with optical dispersion staining techniques developed by the McCrone Research Institute and in compliance with the guidelines established by EPA in its Interim Method for the Determination of Asbestos in Bulk Samples (EPA-600/MA-82-020). The DFEOH laboratory services are currently accredited for bulk asbestos analysis through the EPA Interim Laboratory Accreditation Program for Bulk Asbestos Analysis and by the National Voluntary Laboratory Accreditation Program (NVLAP). Our NVLAP laboratory code number is 1593.

Through the procedures noted above, the sample is separated according to homogeneity and layering and the principal fibrous and non-fibrous components of each sample material are determined. The fibrous components are then classified as either asbestos and non-asbestos and a precentage composition range is determined for each asbestos material identified. A total asbestos content (by volume) for each individual material and the overall/total sample in question is then calculated. Further evaluations are made to determine size and morphology of the asbestos materials identified. For the purposes of this evaluation, asbestos includes: chrysotile, cummingtonite-grunerite (amosite), crocidolite, tremolite, anthophyllite, and actinolite. Asbestos "fibers" for identification purposes are generally classified as particulate matter, which falls within one of the commercial asbestos categories noted above, has physical dimensions longer than 5 micrometers (um), and has a length to diameter ratio of 3 to 1 or greater. Results of these evaluations are listed in Table 1 and are specific for this sample set only.

If you have any question concerning these findings, or if you have additional questions concerning asbestos identification, evaluation, or abatement, please feel free to contact this office at 303/236-0076 or FTS 776-0076. If DFEOH can be of further assistance, please let us know.

(b) (6)
Tim Bergauist

Tim Bergquist PLM Microscopist (b) (6)

Douglas C. Pickup MS Certified Industrial Hygienist

TABLE_1

DIVISION OF FEDERAL EMPLOYEE OCCUPATIONAL HEALTH

BULK ASBESTOS ANALYSIS RESULTS

8930 Ward Parkway, Kansas City, MO

PLM LGN 930089

At the request of the client, all samples analyzed with a 1% or less asbestos content will be reported as zero asbestos detected. Some samples with zero asbestos detected could actually contain up to 1% asbestos mineral fiber.

			ed % Composition					
SAMPLE DESCRIPTION	ASBESTOS PRESENT	ASBESTIFORM MINERAL FIBERS	OTHER CONSTITUENTS	TOTAL % ASBESTOS				
001	No	None Detected		0				
002	No	None Detected		0				
003	No	None Detected		0				
004	No	None Detected		0				
005	No	None Detected		0				
006	No	None Detected		0				
007	No	None Detected		0				
008	No	None Detected		0				
009	No	None Detected		0				
010	Yes	Amosite		3-5				
011	No	None Detected		0				
032	No	None Detected		0				
033	No .	None Detected		0				
012	No	None Detected		0				
013	No	None Detected		0				
014	No	None Detected		0				

Table 1 (Continued)

		(Estimat	ed % Composition	
SAMPLE DESCRIPTION	ASBESTOS PRESENT	ASBESTIFORM MINERAL FIBERS	OTHER CONSTITUENTS	TOTAL % ASBESTOS
015	Yes	Chrysotile	Tile = 5-10% Adhesive = 3-5% Mastic = 2-3%	
016	No	None Detected		0
017	Yes	Amosite		8-10
018	Yes	Amosite 8-10 Chrysotile 8-1		15-20
019	Yes	Amosite		8-10
020	No	None Detected		0
021	No	None Detected		0
022	No	None Detected		0
023	No	None Detected		0
024	Yes	Chrysotile	Tile = 2% Mastic = 20%	
025	No	None Detected		0
026	No	None Detected		0
027	No	None Detected		0
028	No	None Detected		0
029	No	None Detected		0
030	Yes	Amosite		3-5
031	No	None Detected		0

Jiles

in .

DEC 14 1890

Mr. Everett Asberry Director, Facility Support Division United States Department of Agriculture 8930 Ward Parkway. Kansas City, MO 64132

Dear Mr. Asbury

Thank you for the opportunity to review the Asbestos Inspection and Assessment performed at 8930 Ward Parkway, Kansas City, Missouri. The report and associated data appear to be thorough and complete. We agree with the conclusions made and fully support an action plan meeting statutory requirements and General Services Administration's policy.

If you have any questions or need additional information, please contact Kevin Santee at FTS 926-5318.

Sincerely,

[s] Sharon J. Kersey

James J. Hoover Director, Real Property Management and Safety Division Public Buildings Service (6PM)

cc: Official Files - 6PMS
Reading Files - 6P 6PM
6PMS:K.Phillips:bh:12/11/90:x5318

GPML

Kevin, Pat (R+A) gave us this capt for our files. Frum

ASBESTOS INSPECTION SERVICES

AT ·

USDA/ASCS BUILDING

8930 Ward Parkway

Kansas City, Missouri 64141-0205

Prepared for USDA Facilities

Prepared by

OCCU-TEC Incorporated
6501 E. Commerce Avenue, Suite 208
Kansas City, Missouri 64120
(816) 231-5580

(816) 231-5580 1-800-950-1953 6501 E. Commerce Alema Suite 208 Kansas City, Missonn 64120

Industrial Hygiene, Safety & Environmental Consulting

November 24, 1990

Ms. Jeannie Simmons Facilities, Contracting Officer USDA, ASCS, KCMO ASD Facilities 8930 Ward Parkway, PO Box 419205 Kansas City, Missouri 64141-0205

RE: Asbestos Inspection of US Dept. of Agriculture, ASCS Building, Purchase Order #43-6453-1-02014

Dear Ms. Simmons:

As authorized by Purchase Order No.43-6453-1-02014, OCCU-TEC, Incorporated, initiated the work contracted for on October 24, 1990. This letter summarizes our work. The attached reports detail our findings.

The U.S. Agriculture Building was inspected for asbestos containing materials (ACM). All of the work was performed in accordance with the October 18, 1990 Letter of Request for Quotatione. Representative samples of all accessible, suspect ACM were obtained and analyzed.

The data indicate that the thermal system insulation (TSI) is generally non-ACM. The 1/2 inch and 3 inch white mudded pipe joints are the only TSI found to contain asbestos. Miscellaneous materials such as 9"x 9" floor tiles, floor tile adhesives and roofing materials are ACM. Other miscellaneous materials such as ceiling tiles are not ACM. None of the materials such as the 12"x 12" floor tile, wall and ceiling plaster were found to contain asbestos.

The attachments are arranged in the following manner:

Building Summary - Contains a brief description of the building.

Homogeneous Area Report - Describes and quantifies each homogeneous area of suspect ACM. Identifies the areas that are ACM and those that are not ACM.

Functional Space Report - Lists each functional space within the building and the quantities of each homogeneous area within the functional space. Includes an assessment of the material condition and an assessment code definition sheet.

Bulk Sampling Data Report - Identifies and describes each bulk sample taken. Lists the content and type of asbestos in each sample.

Asbestos Bulk Analysis Laboratory Report - Details the analysis of each sample.

Facility Diagram - Illustrates the building layout and location of each sample.

We appreciate the opportunity to serve the Department of Agriculture and look forward to working with you in the future. If you need additional information, please call.



Duncan L. Heydon, PIH - Vice President

DLH:sc

Attachments

BUILDING SUMMARY

BUILDING NAME: U.S. Dept of Agriculture ASCS Building

DATE OF INSPECTION: November 9, 1990

INSPECTED BY: R.K. Clifton

COMMENTS: 8930 Ward Parkway is a three story brick building. The first floor contains the building's computer facilities and boiler room as well as the central heating and air conditioning systems. These are located in rooms on the north side, and the northwest and southwest corners. The second and third floors consist of general office space. The building's water systems and additional HVAC systems are located in the middle of the building on all three floors.

BUSPECT ACM ASSESSMENT CODES

DEFINITIONS

- 1 Damaged or significantly damaged friable suspect ACM thermal system insulation.
- 2 Damaged friable suspect surfacing ACM.
- 3 Significantly damaged friable suspect surfacing ACM.
- 4 Damaged or significantly damaged friable miscellaneous suspect λCM.
- 5 Suspect ACM with potential for damage.
- 6 Suspect ACM with potential for significant damage.
- 7 Any remaining friable suspect ACM.
- 8 Undamaged nonfriable suspect ACM.
- 9 Damaged honfriable suspect ACM.
- 10 Significantly damaged nonfriable suspect ACM.

DATE INSPECTED: 11/09/90 -

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

HOMOGENEOUS AREAS

AREA #	DESCRIPTION	QUANTITY	MATERIAL TYPE	ACH
1	Black tar & gravel roof	65,667 sf	M	Y
2	White perf. 2'x 4' ceiling tile	197,000 sf	M .	11
3	White mudded 3" elbows	63	T	Y
4	4" yel. fibrous PJ insulation	29	T	Ħ
5	White mudded gatevalves & elbows abv ceil-1/2" lne	6	Т	. У
6	9" x 9" tan floor tile	180,861 sf	М	. У
7	12" x 12" cream floor tile	16,160 sf	М	11
8	Black rubber vibration damper	53 sf	М	Ĭ1
9	Vent duct w/brown paper wrap w/blk back	400 sf	T	11
10	Tan pipe wrap, fiberglass w/black back	760 lf	T	11

LEGEND: ACM = ASBESTOS CONTAINING MATERIAL

Y = YES, MATERIAL IS ACM

N = NO, MATERIAL IS NOT ACM

SF = SQUARE FEET

LF = LINEAR FEET

PJ = PIPE JOINT

CT = CEILING TILE

FT = FLOOR TILE

DATE INSPECTED: 11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

HOMOGENEOUS AREAS

AREA #	DESCRIPTION	QUANTITY	MATERIAL TYPE	ACM
. 11	White & tan cementitious ceiling	5380 sf	s	Ħ
12	White 5/8" drywall	25,738 sf	. M	Ħ
13	White drywall mud	780 sf	M	Ħ
14 -	12" off-white pipe wrap insulation	42 sf	T	Ħ
15	Black mastic on rubber baseboard -	7200 lf	M	И
16	Brown/Tan mastic on rubber baseboard	7200 lf	М	H
17	Tan mastic on rubber baseboard	7200 lf	М	n

LEGEND: ACM = ASBESTOS CONTAINING MATERIAL

Y = YES, MATERIAL IS ACM

N = NO, MATERIAL IS NOT ACM

SF = SQUARE FEET

LF = LINEAR FEET

PJ = PIPE JOINT

CT = CEILING TILE

FT = FLOOR TILE

INSPECTOR: R.K. Clifton

DATE INSPECTED: 11/09/90

CERTIFICATION #: 7MW 1090677R

FUNCTIONAL SPACE FORM

·					
FUNCTIONAL SPACE DESCRIPTION	HOMOGENEOUS AREA DESCRIPTION	HMGS AREA #	QUANTITY	MATERIAL TYPE	ASSESS CODE
Roof	Black tar & gravel roof	1	65,667 sf	М	8
Jan closet 3rd fl w/access to roof	White perf 2'x 4' ceiling tile	2	200 sf	M	7
Jan closet 3rd fl w/access to roof	9"x 9" tan floor tile	6	200 sf	M	9
Air handlers rm, 3rd floor	Black rubber vibration damper	8	53 sf	т	. 8
Air handlers rm, 3rd floor	White plaster 3" elbow	3	17	T	6
Air handlers rm, 3rd floor	Air duct w/brn paper wrap/blk back	9	400 sf	T	9

LEGEND: SF = SQUARE FEET LF = LINEAR FEET PJ = PIPE JOINT

CT = CEILING TILE FT = FLOOR TILE

M = MISCESLLANEOUS T = THERMAL S = SURFACING

INSPECTOR: R.K. Clifton

DATE INSPECTED: 11/09/90

CERTIFICATION #: 7MW 1090677R

FUNCTIONAL SPACE FORM

FUNCTIONAL SPACE DESCRIPTION	HOMOGENEOUS AREA DESCRIPTION	HMGS AREA	QUANTITY	MATERIAL TYPE	ASSESS CODE
Phone cable rms - 1st, 2nd, 3rd floor	Tan cementious ceiling	11	220 sf	s .	7
Air handlers rm 2nd floor	Tan p. wrap fiberglass w/black back	10	421 lf	т	7
Store rm by Jan clos, 1st fl rm 123	White 2'x 4' ceiling tile	2	150 sf	М	7
Air handlers rm #122, 1st floor	Pipe wrap fiberglass w/black back	10	278 lf	T	7
Àir handlers rm #122, 1st floor	White & Tan cementious ceiling	11	820 sf	、 5	7.

SF = SQUARE FEET LF = LINEAR FEET PJ = PIPE JOINT CT = CEILING TILE FT = FLOOR TILE LEGEND:

M = MISCESLLANEOUS T = THERMALs = surfacing

INSPECTOR: R.K. Clifton

DATE INSPECTED: 11/09/90

CERTIFICATION #: 7MW 1090677R

FUNCTIONAL SPACE FORM

	The state of the	•			
FUNCTIONAL SPACE DESCRIPTION	HOMOGENEOUS AREA DESCRIPTION	HMGS AREA #	QUANTITY	MATERIAL TYPE	ASSESS CODE
Store rm by Jan clos /1st fl rm 123	12"x 12" cream floor tile	7	150 sf	М	8
Janitor's closet, rm 123	White 5/8" drywall	12	500 sf	М	7
Janitor's closet, rm 123	White drywall	13	30 sf	М	7
Air cond rm off computer rm 1st floor	Tan 9"x 9" floor tile	6	1500 sf	Ņ	9
E NCC rm or comp rm 1st fl	White 5/8" drywall	12	3000 sf	M	7
Air handlers rm, 2nd floor	4" yellowish fibrous PJ	4	27 joints	Т	7

LEGEND: SF = SQUARE FEET LF = LINEAR FEET PJ = PIPE JOINT

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INSPECTOR: R.K. Clifton

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CERTIFICATION #: 7MW 1090677R

FUNCTIONAL SPACE FORM

FUNCTIONAL SPACE DESCRIPTION	HOMOGENEOUS AREA DESCRIPTION	HMGS AREA #	QUANTITY	MATERIAL TYPE	ASSESS CODE
	insulation				
Janitor's closet leading to roof	White drywall mud	13	80 sf	М	7
S elevator rm, 1st floor	2'x 4' white ceiling tile	2	190 sf	M .	7
Heat/air rm 1st fl off computer rm	12" tan pipe wrap insulation	14	42 sf	Т	7
Copier area 3rd fl behind copier	black mastic on baseboard	15	ap 7200 lf	M .	8
Hall 2nd fl across from pillar 2C8	Brown/Tan mastic on baseboard	16	ap 7200 lf	М	8

LEGEND: SF = SQUARE FEET LF = LINEAR FEET PJ = PIPE JOINT

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DATE INSPECTED: 11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

FUNCTIONAL SPACE FORM

` <u></u> -					
FUNCTIONAL SPACE DESCRIPTION	HOMOGENEOUS AREA DESCRIPTION	HMGS AREA #	QUANTITY	MATERIAL TYPE	ASSESS CODE
Hall 1st floor next to rm 121	Tan mastic on baseboard	17	ap 7200 lf	М	8
Heat & Air cond rm off comp rm 1st fl	White mudded 1/2" jnts/gatevalves	.	6 joints	T	1
Air handlers rm 3rd fl	White Drywall	12	530 sf	М	8
Heat/air rm, NW corner NCC	Drywall mud	13	47 sf	M	7
Heat/air rm off 1st fl computer rm	(QC samp) 12" tan P.wrp insulation	14	42 sf	T	· 7
Air handlers room, 3rd floor	(QC samp) 4" yel.fib. PJ ins	4	29 joints	т	7

LEGEND: SF = SQUARE FEET LF = LINEAR FEET PJ = PIPE JOINT

CT = CEILING TILE FT = FLOOR TILE

M = MISCESLLANEOUS T = THERMAL S = SURFACING

DATE INSPECTED: 11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

BULK SAMPLING DATA

SAMPLE NUMBER	HOMO LOC	FLOOR LOC	ROOM LOC	DESCRIPTION OF MATERIAL	ASBESTOS TYPE/%
R001	1	···-	roof	Black roofing tar	8% C
CT002	2	3rd		White perf 2'x 4' ceiling tile	ND
FT003	6	3rd	Janitor Closet	9" x 9" tan floor tile	10% C
V J004	8 .	3rd	Air handling	Rubber vibration damper	ND
PJ005	3	3rd	Air handling	White 3" elbow pipe joint	15%A 5%C
DW006	12	3rd	Air hand. rm	White chalky drywall	ND
DW007	9		Air handling	Yellow fib. duct wrap w/brn paper	ND

REMARKS:

ND = NONE DETECTED

TR = TRACE

C = CHRYSOTILE ASBESTOS
CR = CROCIDOLITE ASBESTOS
λ = λMOSITE ASBESTOS

DATE INSPECTED:

11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

BULK SAMPLING DATA

	_				
SAMPLE NUMBER	HOMO	FLOOR LOC	ROOM LOC	DESCRIPTION OF MATERIAL	ASBESTOS TYPE/%
CC008	11	3rd	Phone cable room	White & tan cement.	ND
PW009	10	2nđ	Air handling rm	tan pipe wrap w.black backing	DIE
СТ010	2 .	lst	123	White perf 2' x 4' ceiling tile	ИD
PW011	10	1st	122	Tan 3" pipe wrap ins w/black back	ND
CC012	11	1st	122	Cementitious ceiling	ND
FT013	7	1st	123	12"x 12" cream floor tile	ND

REMARKS:

ND = NONE DETECTED

C = CHRYSOTILE ASBESTOS

CR = CROCIDOLITE ASBESTOS

A = AMOSITE ASBESTOS

TR = TRACE

DATE INSPECTED:

11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

BULK SAMPLING DATA

SAMPLE NUMBER	HOMO LOC	FLOOR LOC	ROOM LOC	DESCRIPTION OF MATERIAL	ASBESTOS TYPE/%
 DW014	12		123	5/8" white drywall	ND
DWM015	13	lst	123	white drywall mud	ND
PW016	14	lst	Heat & air .	12" off white pipe wrap insulation	DIE
PJ017	5	lst	Heat & air cond	Off wht 1/2" PJ mud above ceiling	15%A 3%C
OWM018	13	1st	Heat & air cond	White drywall mud	ממ
Т019	6	1st	Heat & air cond	9"x 9" tan floor tile	5% C
)W020	12	1st	NCC room	White 5/8" drywall	nd

REMARKS:

ND = NONE DETECTED

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C = CHRYSOTILE ASBESTOS
CR = CROCIDOLITE ASBESTOS

 $\Lambda = \Lambda MOSITE ASBESTOS$

DATE INSPECTED: 11/09/90

INSPECTOR: R.K. Clifton

CERTIFICATION #: 7MW 1090677R

BULK SAMPLING DATA

					DESCRIPTION OF MATERIAL	ASBESTOS TYPE/%	
4	2nd	Air handling	4" yellow fibrous pipe joint insul.	ND			
13	3rd	Janitor Closet	Drywall mud	ND			
2	lst	S. Elevator Rm	White perf 2'x 4' ceiling tile	ИД			
4	2nd	Air handling	4" yellow fibrous pipe joint insul	ND			
14	1st	Heat & air cond	Off white 12" pipe wrap	ИD			
15	3rd	Behind copier	Black mastic	ND			
	13 2 4	10C LOC 4 2nd 13 3rd 2 1st 4 2nd 14 1st	LOC LOC LOC 4 2nd Air handling rm 13 3rd Janitor Closet 2 1st S. Elevator Rm 4 2nd Air handling rm 14 1st Heat & air cond 15 3rd Behind	LOC LOC LOC OF MATERIAL 4 2nd Air handling 4" yellow fibrous pipe rm joint insul. 13 3rd Janitor Drywall mud Closet 2 1st S. Elevator White perf 2'x 4' ceiling tile 4 2nd Air handling 4" yellow fibrous pipe rm joint insul 14 1st Heat & air Off white 12" pipe wrap cond 15 3rd Behind Black mastic			

REMARKS:

ND = NONE DETECTED

TR = TRACE

C = CHRYSOTILE ASBESTOS
CR = CROCIDOLITE ASBESTOS

A = AMOSITE ASBESTOS

INSPECTOR: R.K. Clifton

DATE INSPECTED: 11/09/90

CERTIFICATION #: 7MW 1090677R

BULK SAMPLING DATA

SAMPLE NUMBER	HOMO	FLOOR LOC	ROOM LOC		DESCRIPTION OF MATERIAL	ASBESTOS TYPE/%
BBM027	16	2nd	S side of Escal.	Tan	mastic :	ND
ВВМ028	17	1st	By storage clos.	Tan	mastic	, ND

REMARKS: ND = NONE DETECTED

C = CHRYSOTILE ASBESTOS
CR = CROCIDOLITE ASBESTOS

A = AMOSITE ASBESTOS

TR = TRACE

USDA/ASCS 8930 WARD PARKWAY KANSAS CITY, MISSOURI 64141

On the drawings, the hash marks note 1' \times 1' floor tile which was found to be non-asbestos-containing material (ACM). All other areas have 9" \times 9" tan floor tile underneath carpeting. This floor tile and mastic, which exists on all three floors, contains asbestos.

<u>ACM</u>

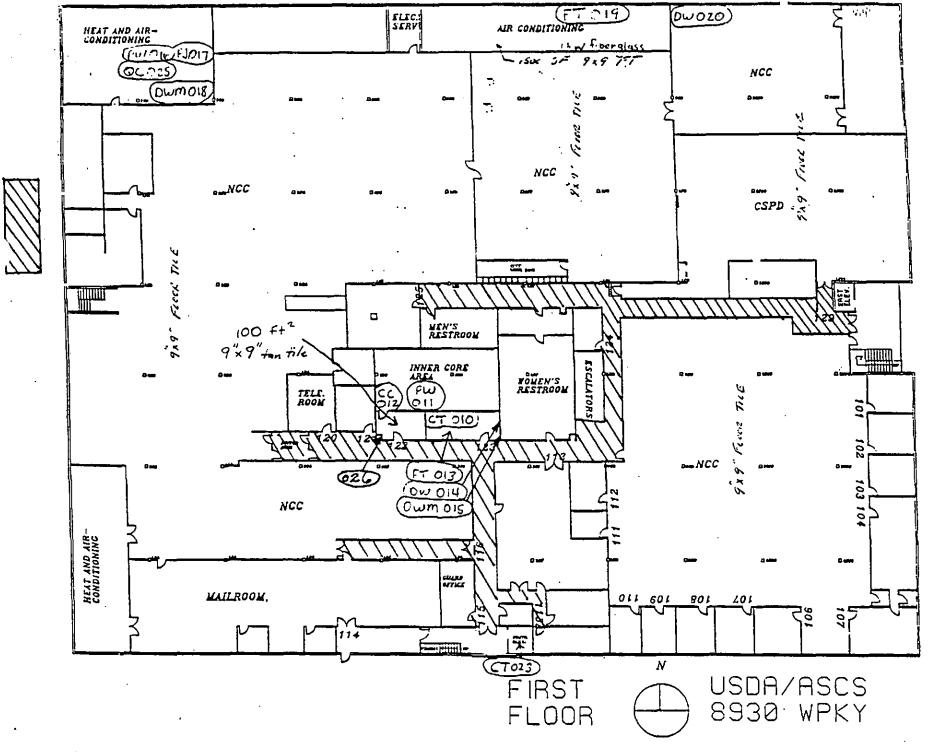
Approximate Footage

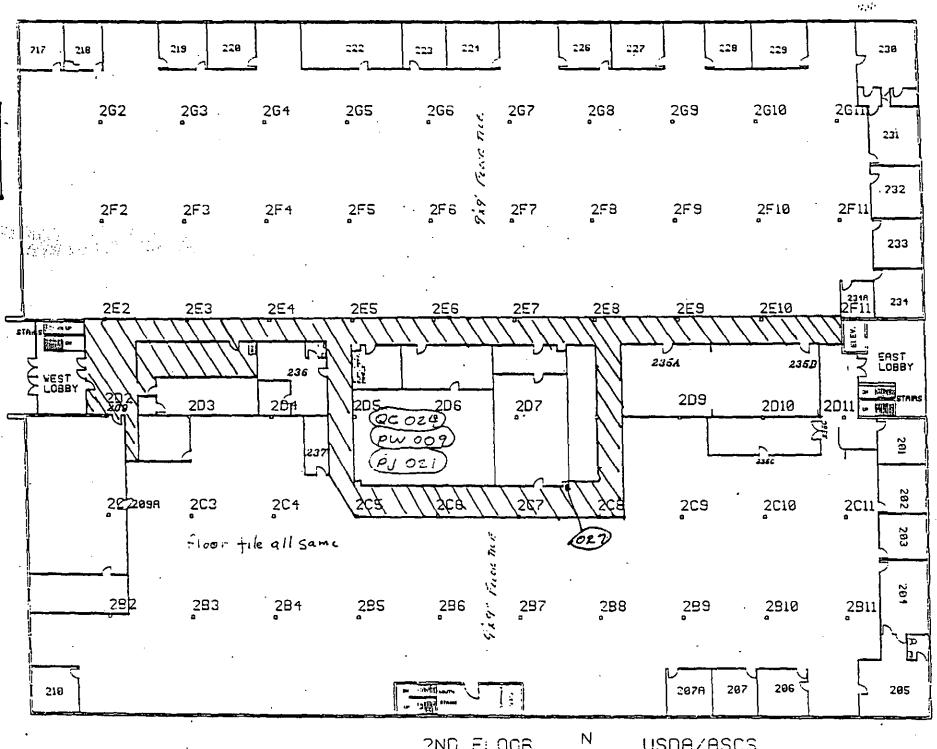
lst	Floor	-	9"	X	9"	tan	floor	tile60,467	sf
2nd	Floor	-	9"	X	9"	tan	floor	tile62,287	sf
3rd	Floor	-	9"	X	9"	tan	floor	tile59,087	sf

NON-ACM

Approximate Footage

1st	Floor	_	1'	X	1'	cream	colored	floor	tile5,200	sf
2nd	Floor	-	1'	х	1'	cream	colored	floor	tile4,380	sf
3rd	Floor	_	1/	x	1/	cream	colored	floor	tile6.580	sf

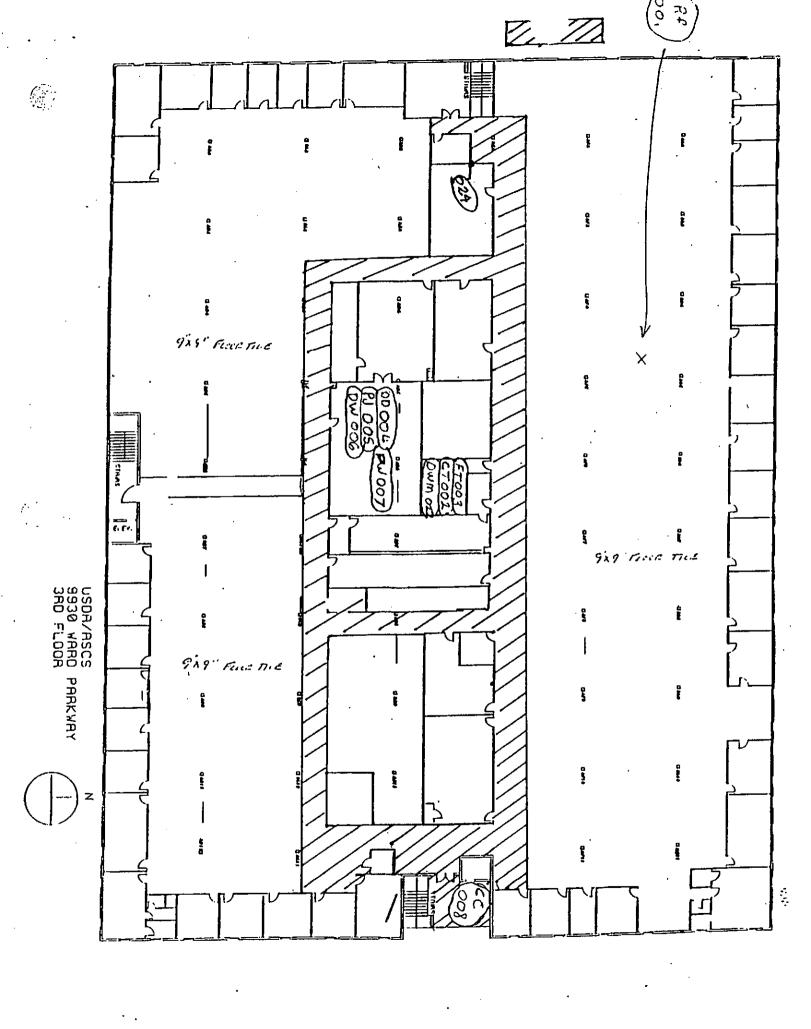




2ND F: 00R



USDA/ASCS 8930 WARDPARKWAY



14953 W. 101ch Terr. Lenexa. FS & WVLAP ACCREDITATION
Asbestes Figure Analysis
VVLAP Lab 100 .649

Client: Occumiec

Job : 1163

Sample Date:

(913) 492-1337

Address:

Collected By: RK Clifton

Report # 9-4078

Submitted By: Jim Carolla

Analyst: Tim Barrow

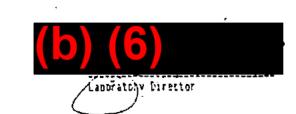
Date Submitted: 11/05/90

Analysis Date : 11/07/90

The asbestos analysis was performed by polarized light microscopy with dispersion staining in accordance with EPA test method for the determination of asbestos in bulk samples (EPA-600/m4-82-020). The approximate percentage of fibers is listed. Method of measurement is based on visual approximation. The data provided herein relates only to those samples submitted for analysis.

Sample #	Description of Material	Exact Location of Material	Asbestos Form	ï	Non-asbestos Forms	ì	Non-fibrous Foras	1
R-001	Elack viscous		Chrysotile	8	N/A	N/A	Bulk	92
CT-902	Gray fibrous		None Detected		Cellulose Fibrous glass	30 45	Fulk	25
FT-003	Seice ceaentitous		Chrysotile	10 %	N/A	N/A	Sulk	90
VJ-004	Grown fibrous cloth		None Detected		Cotton	. 90	Bulk	10
PJ-0057 \$2	ASSECT Being chally assection		Chrysotile	115	Fibrous jolass	335	enta	
			Hone Detected		Cellulose	100	ênu.	83

Connents:



Client: Occu-Tec

Job : 1153

Sample Date:

Address:

Collected By: RK Clifton

Report # 9-4078

Submitted By: Jim Carolla

Analyst: Tim Barrow

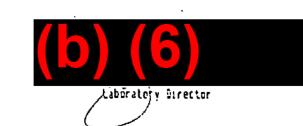
Date Submitted: 11/06/90

Analysis Date: 11/07/90

The asbestos analysis was performed by polarized light dicroscopy with dispersion stanning in eccordance with EPA test method for the determination of asbestos in bulk samples (EPA-600/m4-22-020). The approximate percentage of fibers is listed. Method of measurement is tased on visual approximation. The data provided herein relates only to those samples submitted for analysis.

Sample #	Description of Material	Exact Location of Material	Astesios Form	ĭ	Non-asbestos Forms	1	Non-fibrous Forms	
FT~013	Off-white cementitous		None Letected	,	Cellulose	trace	Bulk	100
98-014	White chalky/tan fibrous		None Letected		Fibrous glass Cellulose	15 25	Bul k	60
۲۴ ^۳ EN-015 ۱۳۳۵ - ۲۳۳۵	Off-white chalky/tan fibrous		None letected		Cellulose Synthetic	20 trace	Bulk	9 0
ੂੰ ਨੂੰ ਨੂੰ ਜ਼ਿਜ-916	off White chalky/fibrous		None jetested		Synthetic Fibrous glass	35 20	Bul k	45
PJ-017	Off-white chalky/fibrous		Amosite Grosspolite	15 3	Fibrous glass	35	Bulk	
BMW-018	Off-white/tan cementitous		Mone letected		Cellulose	5	Eulk	95

Comments:



14953 W. 101st Forr. Egnexa, ES &: ASSESTED FOR ANALYSIS

RVEAP Lab 649

Client: Occu-Tec

Job : 1163

Sample Date:

1913) 492-1337

Address:

Collected By: RK Clifton

Report # 9-4078

Submitted By: Jim Carolla

Analyst: Tim Barrow

Date Submitted: 11/06/90

- Analysis Date : 11/07/90

The asbestos analysis was performed by polarized light microscopy with dispersion staining in accordance with EPA test method for the determination of asbestos in bulk sample (EPA-600/m4-92-020). The approximate percentage of fibers is listed. Method of measurement is based on visual approximation. The data provided herein relates only to those samples submitted for analysis.

Sample #	Description of Material	Exact Location of Material	Asbestos Fora	r	Non-asbestos Forms	I	Non-fibrous Fores	
FT-019	· Tab cementitous		Chrysotile	5	N/A	N/A	aulk .	95
DH-020	White chalky/tan fibrous		Kane Detected		Cellulose Fibrous glass	40 10	Bulk	50
PJ-021	Yellow fibrous		None Detected		Fibrous glass Cotton	55 30	Bulk	15
DWK-022	Off-white chalky fibrous		Hone Detected		Cellulose	45	Sulk	55
CT-023	Gray fibrous		None Détected		Cellulose Fibrous glass	20 22	Suli	
QC-024	Yellow fibrous		Hone Detected		Cotton Fibrous glass Cellulose	45 30 15	Bulk	10
00-025 سنيز	coff White chalky/fibrous		None Detected .		Synthetic Fibrous glass	35 15	9014	.50

Connents:

(b) (6)

(913) 492-1337

MWLAP ACCREDITATION
Asbestos Analysis
MVLAP Lau = 1649

Client: Occu-iec

Job : 1163

Samole Date:

Address:

Collected By:

Report # 5-4094

Submitted By: RK Clifton

Analyst: Jin Pickel

Date Submitted: 11/12/90

Analysis Date : 11/12/90

The asbestos analysis was performed by polarized light microscopy with dispersion staining in accordance with EPA test method for the determination of asbestos in bulk sample (SPA-600/m4-82-020). The approximate percentage of fibers is listed. Method of measurement is based on visual approximation. The data provided herein relates only to those samples submitted for analysis.

~-	Sample #	Description of Material	Exact Location of Material	Asbestos Fora	ĭ	Non-asbestos Forms	1	Non-fibrous Forms	
٠.	88H-024 88m-026	Brown cementitous	,	None Detected		Cellulose	trace	Bulk	100
	89N-025 88M - 027	Brown tan cementitous	Mastic on baseboard	None Detected		Cellulose	trace	Bulk	10
	BBM-025 BBM-028	Tan cementitous	Mastic on baseboard	Hone Detected		Cellulose	trace	£u1 k	10

Comments:

Laboratory Director

hoper uponty in 1100 Aspestos Fi² - Analysis MVLAF Lab 649

14953 W. 101st Terr. Lenexa. K5 5/ 19131 492-133/

Client: Occu-Tec

Job : 1163

Sample Bate:

Address:

Collected By: RK Clifton

Report # 6-4078

Submitted Ev: Jim Carolla

Analyst: Tim Barrow

Date Subsitted: 11/06/90

Analysis Date: 11/07/90

The asbestos analysis was performed by polarized light microscopy with dispersion staining in accordance with EPA test method for the determination of asbestos in bulk said term-500/m4-82-020). The approximate percentage of fibers is listed. Method of measurement is based on visual approximation. The data provided herein relates only to those samples submitted for analysis.

Sample #	Description of Material	Exact Location of Material	Asbestos Form	7	Kon-asbestos Foras	ĭ	Mon-fibrous fores
14-607 12-607 12-207	Yellow fibrous/brown pager		None Detected		Fibrous glass Cellulose	\$5 25	Bulk
2× ≈ 1008	White/tan cementitous	•	Hone Detected		N/A	А/А	Bul k
£#-00å	Tan/black fibrous	•	None Detected		Cellulose	45	5ulk
51-010	Lt. gray fibrous		None Detected		Cellulose Fibrous glass	45 40	gulk
FW-011	· Tan fibrous-black viscous		None Detected		Fibrous glass Cotton Cellulose	45 30 15	Eulk
CC-012	Off-white cementitous		Home Detected		N/A	R/A	Eulk

Coanents:



February 12, 1982

- Operations Branch, EMD (6PBO)

Combustion Efficiency Tests and External Boiler Inspection, Federal Office Building, 8930 Ward Parkway, Kansas City, MD

6PF-4S

The following equipment was inspected on February 9, 1982; recommendations developed as a result of this inspection should receive your attention.

No. 1, 3F27 (1960) Thermo Pac Boiler

Externally fittings and controls appeared in order and good repair. Considerable rust and other foreign objects were noted on the floor under the burner plate. Suggest this area be cleaned up.

Combustion efficiency tests were conducted with unfavorable results. As indicated, the stack temperature and oxygen readings are excessive which produces a very low efficiency. This condition is produced by a poorly designed burner from the era of cheap energy costs. A copy of this report is being submitted to 6PBI recommending new programed forced air burners be installed in No. 1 and 2 boilers.

FUEL GASZHIGH FIRE

Stack Temperature Ambient	,	611 ^O F
Net Stack Temperature		531°F
Oxygen (O ₂)		14.5%
Combustion Efficiency		60%

No. 2, 3F25 (1959) Thermo Pak Boiler

No. 2 boiler is the lag boiler and at the time of our test was not uniformly hot, however, the readings were basically the same as No. 1 boiler with the exception of the stack temperature.

FUEL GAS/HIGH FIRE

Stack Temperature	370 <u>~</u> F	
Ambient	8CSF	
Net Stack Temperature	290°F	
Oxygen (O2)	18.8%	(off scale)
Efficiency	60%	Estimated

During the course of our inspection it was noted the safety relief valve is leaking; this valve should be replaced.

No. 3, 399K4 Kewanee Fire Tube Boiler

Externally fittings and controls were found in order and proper operating condition. Combustion tests were conducted and minor burner adjustments were made with the following results.

FUEL GAS/HIGH FIRE

	1	_2	3_	. 4	5_
Stack Temperature Ambient	366 ^O F 46 ^O F	327°F 46°F	316 ^O F 46 ^O F	313 ^O F 46 ^O F	313°F 46°F
Net Stack Temperature	320 ⁰ F	320°F	270 ^O F	267 ⁰ F	267 ⁰ F
Oxygen (O ₂)	11.5%	7.1%	5.0%	4.1%	4.5%
Efficiency	77.9%	81.3%	82.3%	83.9%	83.7%

As indicated, the ambient room temperature is 46°F through the free air opening. Suggest a motorized damper be installed over the free air opening. The present arrangement allows cold air to flow through the fire box causing possible thermal shock in addition to reduced efficiency.

Vs/ JAMES J. HOOVER

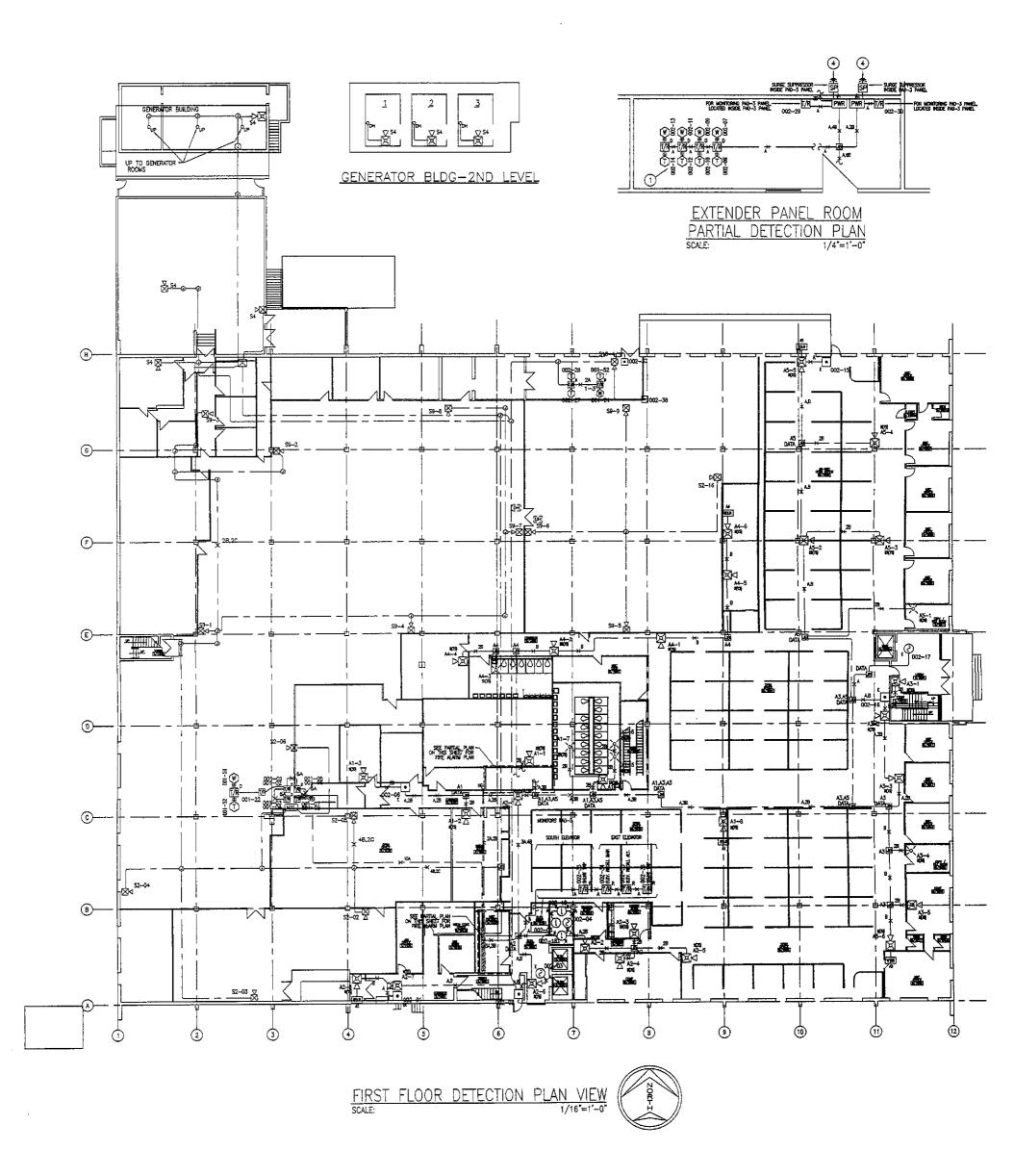
JAMES J. HOOVER
Director, Buildings Management Division
Public Buildings Service

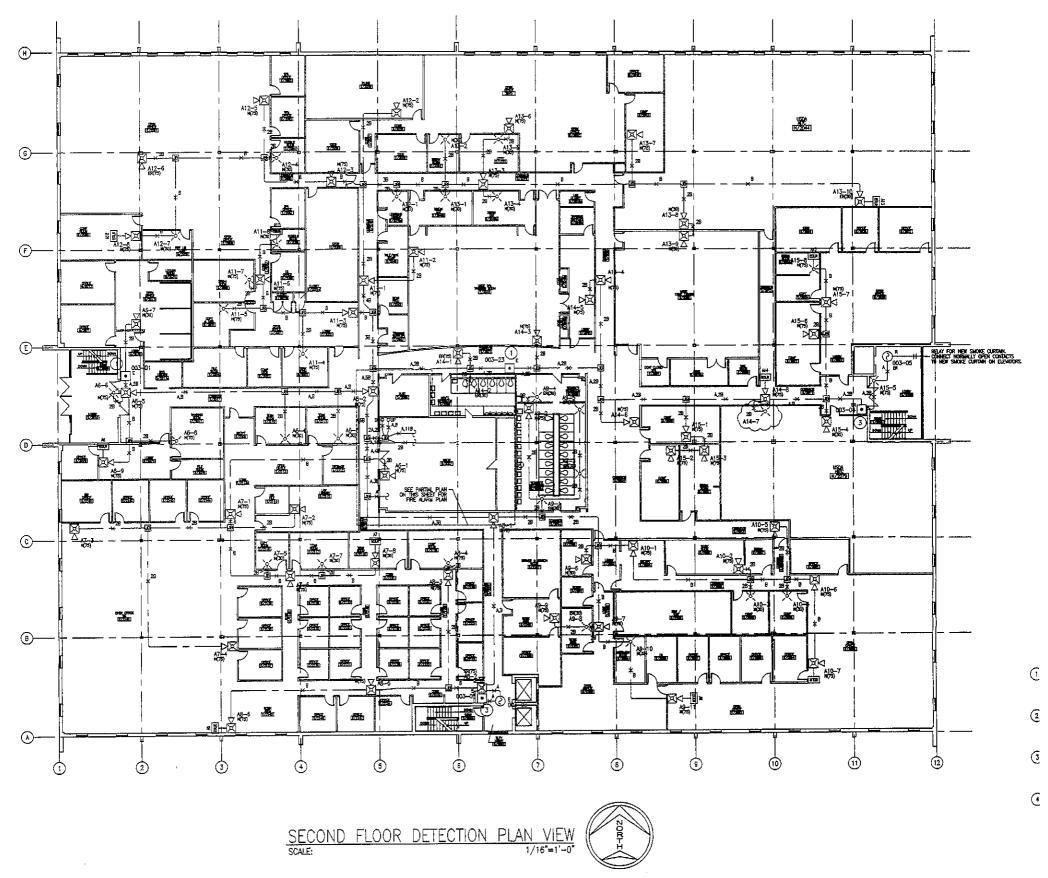
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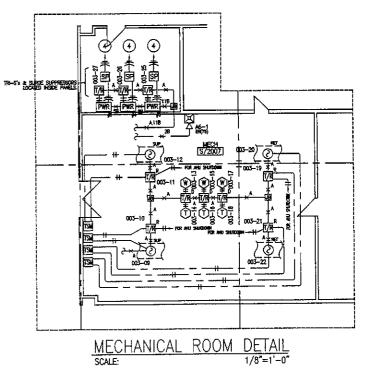
Official File - 6PBOD Reading Files - 6P 6PB 6PBI

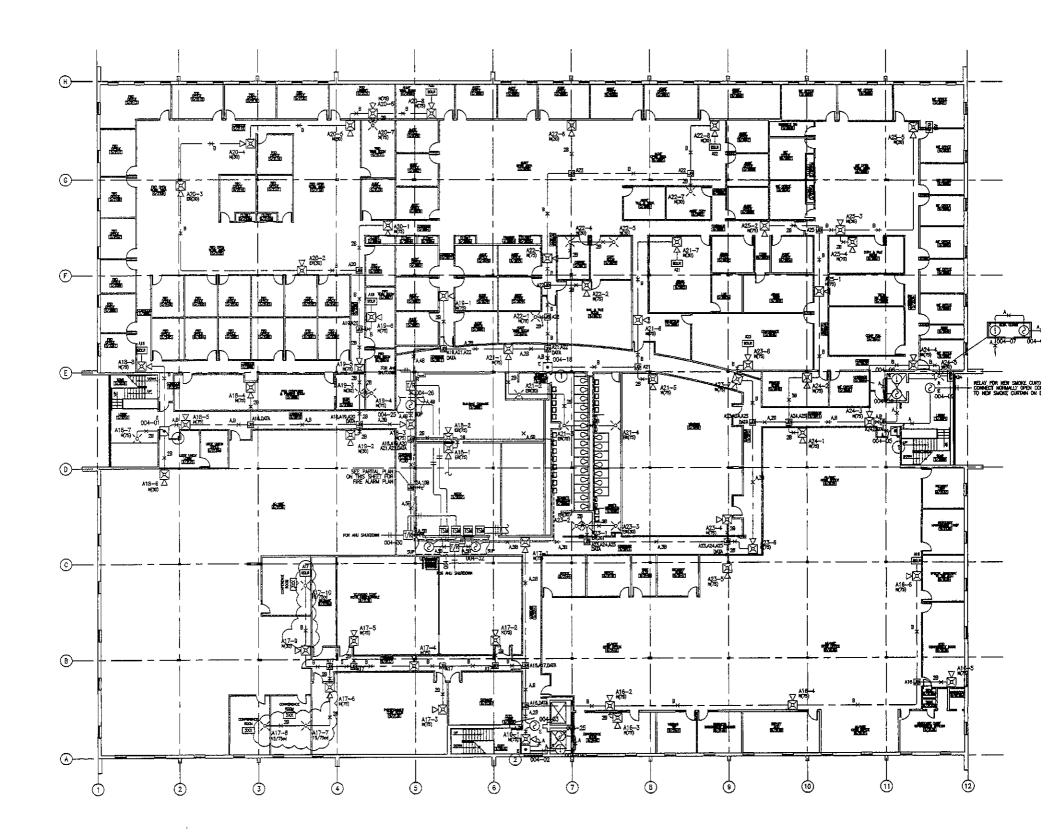
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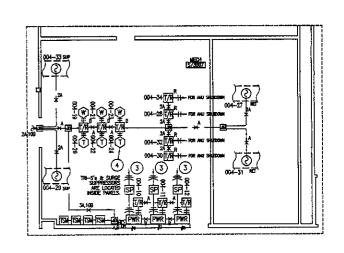




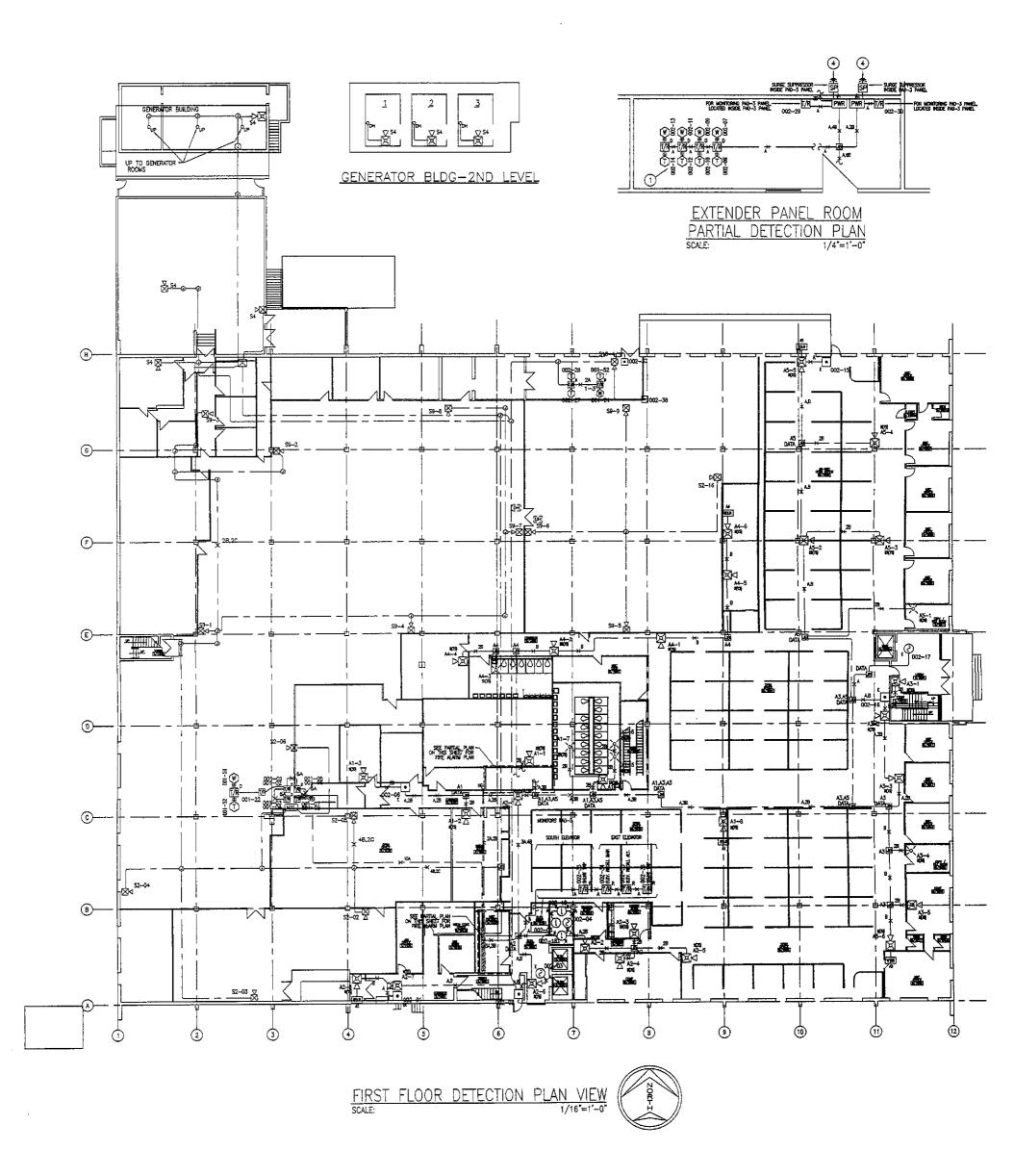


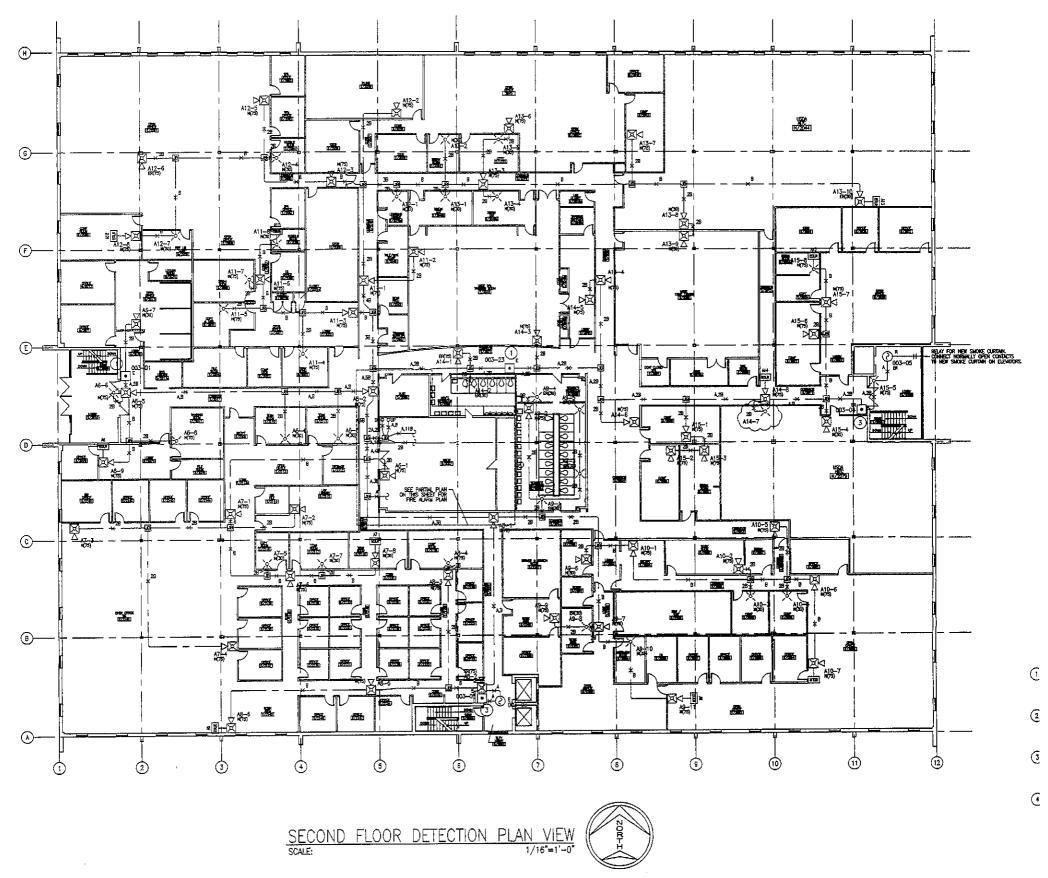
THIRD FLOOR DETECTION PLAN VIEW SCALE: 1/16"=1"-0"

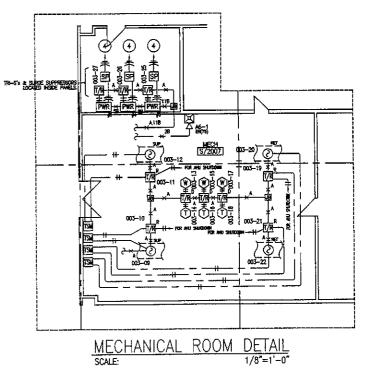


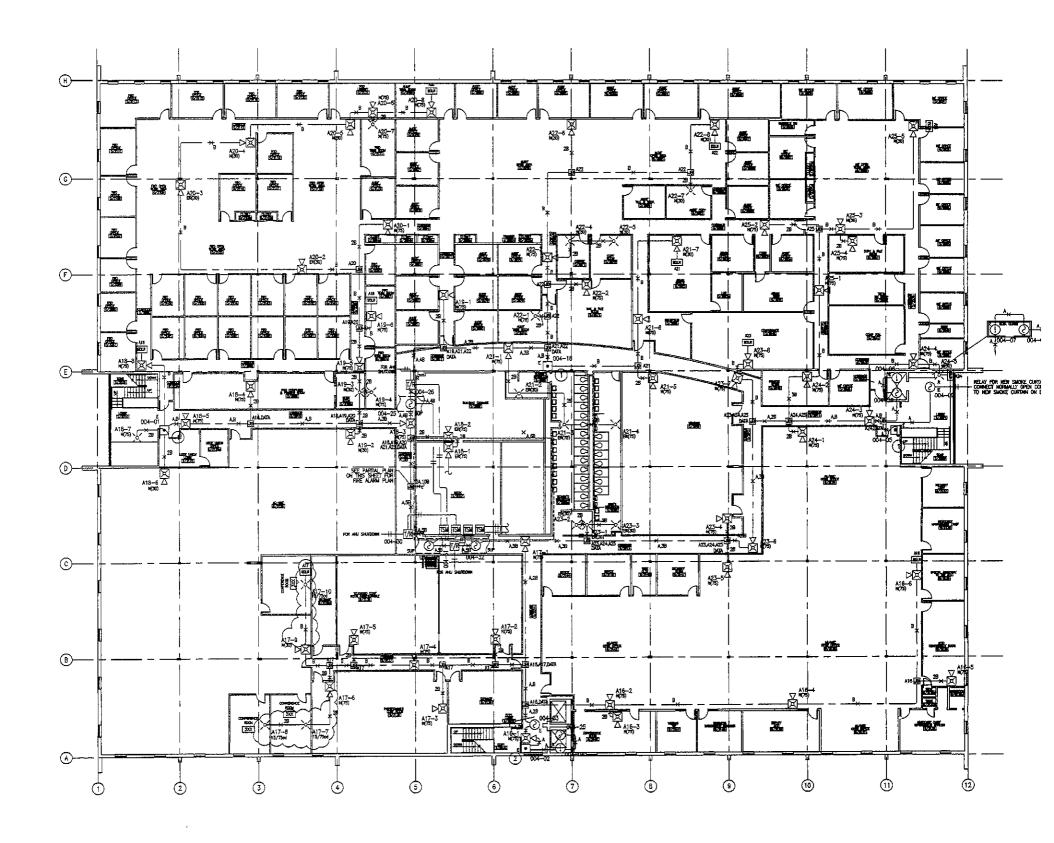


MECHANICAL ROOM DETAIL NOT TO SCALE



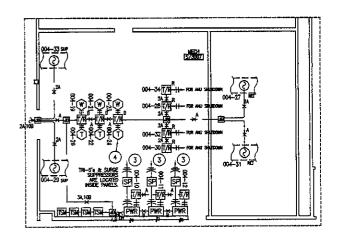






THIRD FLOOR DETECTION PLAN VIEW SCALE: 1/16"=1"-0"





MECHANICAL ROOM DETAIL NOT TO SCALE